

Promotor Prof. Dr. Mark Janse
 Vakgroep Taalkunde

Decaan Prof. dr. Marc Boone
Rector Prof. dr. Anne De Paepe

Nederlandse vertaling:

‘Van coherentie naar procedures. Een relevantie-theoretisch onderzoek naar de *discourse markers* δέ, γάρ en οὐν in Basilius de Grotes *Hexaemeron*, Gregorius van Nazianzes *Invectieven Tegen Julianus* en Heliodorus’ *Aethiopica*.’

Cover image: detail of *Alors on danse*, by Patrice De Maeyer (2014). © Patrice De Maeyer 2017

From coherence to procedures

A relevance-theoretic approach to the discourse markers $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ in Basil the Great's *Hexaemeron*, Gregory of Nazianzus's *Invectives Against Julian* and Heliodorus's *Aethiopica*

Samuel Zakowski

Proefschrift voorgelegd tot het behalen van de graad van
Doctor in de Taalkunde - Grieks

2017



Acknowledgments

No days off!

--- Bill Belichick, coach of the New England Patriots, two days after winning the Super Bowl.

Sometimes you look back on what you've been doing for the past few years, and you wonder what in tarnation happened. So you decide to study in a different city – no big deal. You choose to specialize in Latin and Greek – OK, maybe that's a bit strange. Then you decide to apply for a fellowship for doing research into Ancient Greek (oh and by the way, you only have a tiny chance of getting the funding you want) – what are you doing? Now it's January 2017, and you're finishing up your dissertation, but you also want to apply for a post-doctoral fellowship, so you're juggling metaphors and irony in one hand and discourse markers in the other and all of a sudden it's five o'clock in the morning and the caffeine high is starting to wear out and you're trying to cut 800 words from an application where you've already deleted every adjective – this is where you start to wonder if it's all worth it. And the answer is: one hundred percent.

I am so happy with what I've done these last few years, and really excited about the words you're about to read. I'm about to connect Ancient Greek and evolutionary psychology; one-syllable words and manipulation; 4th-century treatises on what the 'abyss' means in the book Genesis and cutting-edge research on how the brain works. Also, I'm about to go against a framework which has been the standard for my field of research in Ancient Greek for at least twenty years, so wish me luck.

All kidding aside, I just feel lucky to have had the opportunity to do what I like to do these last few years. I've written on Ancient Greek, hip hop and President Obama - that should tell you enough about the fun I've had both doing this job, and discovering how what I do for a living ties in with what I'm passionate about in 'real life'. This wouldn't be possible if I wasn't surrounded by people who excel at what they do, and who have unwittingly challenged me to do the best I can do. Metin is probably keynoting at some conference halfway across the globe right now; Filip is probably researching the correspondences between Proto-Indo-European vowels which I couldn't even write down properly; Klaas is probably preparing another research stay at another ultra-

prestigious institution. I'm just trying to ride all of your coattails, baby! Jorie and Delphine have defended their dissertations and left for greener pastures, but I still think about them a lot – both had the rare ability to combine a tremendous intellect with a grounded attitude, and our section is poorer for their departure in more than one sense.

Mark, of course, is the one most deserving of my acknowledgments. He never wavered in his belief that I could do this – even after an academic rejection which was not unexpected, but still hit me pretty hard. His comments improved this dissertation tremendously; more importantly, he always supported me in what I did – whether that was analyzing deverbil discourse markers in Homer, or giving a talk at a conference on games. I'll never be able to properly express my gratitude to him for allowing me to develop my own interests. More than anything else, I just feel lucky that I am able to call Mark a friend and not (just) a promotor – he is as smart as he is generous, and his brilliance never detracts from the fact that he's a great guy to go out for a drink (or lunch) with.

No acknowledgments are complete without mentioning your parents, and I am no different in this regard. Mom and dad not only supported me when I chose to go to Ghent and when I wanted to pursue a doctoral degree in what is honestly a shrinking field – they encouraged me. I'm the first doctor in my family (I think) and, while I won't be curing cancer, I hope to have made them proud – without them, I wouldn't even be close to where I am today. My mom also made the painting which I'm proud to use as the cover for this book – it's a brilliant work, and one which is very near to her heart.

Last but definitely not least is Sas. We've been together for more than eight years now, and both of us have evolved in so many ways since we were 18 years old. (Most of all, we're now even prettier. Okay, so maybe she is.) Through all of this and beyond, she's been my spotter – not just in the gym, but also when I'm not happy about what I've written that day, or when my favorite sports team loses and I take it (too) hard, or when she destroys me in a board game and I can't deal with my defeat. She's always there, and I wouldn't have it any other way. (She also checked my references for this dissertation, which is arguably the sweetest thing anyone's ever done for me.)

Preface

This dissertation is about discourse markers – linguistic items traditionally seen as being connective, optional and non-truth-conditional (Schourup 1999), like *so* and *but* in English; *ja* and *denn* in German; *donc* and *car* in French; and δέ (*dé*), γάρ (*gár*) and οὖν (*oûn*) in Ancient Greek. It is these latter three I will focus on in this study, looking at their meaning through a cognitive-pragmatic lens.

In a sense, though, this dissertation is also *not* about these discourse markers (DMs). It is also about how we process language. It is (or at least tries to be) firmly rooted in current views on evolutionary psychology, which can be summarized as follows:

“[E]volution has built biological machines with a unique function: to create representations of the world, and to use these representations to navigate within it.” (Barrett 2015: 17)

This view has some major implications for how communication, as a uniquely human capability, should be construed. Ground zero for this dissertation is the assumption that communication is aimed at communicating representations (Sperber & Wilson 1995²: 2), and that this ability is constrained evolutionarily, in line with Barrett’s quote above – as well as the title of Dobzhansky’s (1973) famous essay against creationism, ‘Nothing in Biology Makes Sense Except in the Light of Evolution’. If the ability to communicate is in some way hardwired in our mental architecture, it must be explained along the lines of evolutionary theory (cf. Scott-Phillips 2015: 86-87). Although this may seem to be a straightforward starting point for any scientific study, I would argue that it has blended into the background of most approaches to Ancient Greek DMs. Studies of these linguistic items typically focus on a dimly conceived notion of what makes communication into more than a random sequence of words – i.e., on coherence. While this has led to some very valuable research – research which has shaped my own conclusions to a significant degree –, I would argue that it is inherently limited due to its lack of rigor in light of what we know about how language evolved. It is built on assumptions which have not (and, arguably, cannot) be explained from an evolutionary point of view. In line with Blakemore (2002: 2), then, my object of interest here is as

much “expressions classified as discourse [...] markers as [...] the theoretical assumptions that are made by those writers who have analy[z]ed expressions as discourse connectives or markers” – although I do devote a lot of space to analyses of the different DMs as well.

My main focus will be on how we process utterances – that is, on thoughts and minds, not on discourse and texts. While I look at texts, of course – how could I not, with a dead language as the topic of interest? –, I do not look at them as texts, necessarily – I look at them as representations of an underlying communication process, in which the speaker, whoever it is, aims to communicate assumptions in an optimally relevant way. ‘Optimally relevant’ is defined in an evolutionary realistic way, following the framework provided by Sperber & Wilson’s (1995²) *Relevance: Communication & Cognition*. Relevance theory, as Sperber & Wilson’s framework is known, argues that human communication is ostensive-inferential – ostensive because the speaker makes manifest that something is being communicated, inferential because it relies on the hearer’s inferential abilities (Clark 2013: 98). An utterance is more relevant if it produces effects which are requisite with the effort necessary to derive the speaker-intended interpretation – if an utterance is very long or complex, for instance, the hearer will expect to derive more effects. Relevance is a gradual concept – an utterance can be more or less relevant, depending on the effects gleaned or the effort put in. Most importantly, however, relevance is an evolutionarily stable concept – that is, Sperber & Wilson’s construal of relevance is in line with what we would expect if we approached communication from an evolutionary point of view (Scott-Phillips 2010).

The work you’re reading is, as stated, not exclusively concerned with Ancient Greek. The aim here is to demonstrate that an evolutionarily realistic, relevance-theoretic approach to linguistics has advantages over a coherence approach – both from the conceptual get-go and as a framework for deep-dive analyses of specific DMs. The discourse markers under consideration function as a case study for this aim. I hope to show that my analyses of these items have some clear advantages over existing ones – not because I have some unique insight which other scholars don’t have, but because the relevance-theoretic framework offers methodological machinery which is simply better suited for getting at the semantics of these intractable items.

The corpus of texts I am considering consists of three fourth-century texts. Two of them are argumentative (Basil the Great’s *Hexameron* and Gregory of Nazianzus’s *Invectives Against Julian* (or *Contra Iulianum*)), while the other is narrative (Heliodorus’ *Aethiopica*). In this preface, I’ll briefly present the main thrust of these texts – afterwards, I will provide the reasoning behind my choice to analyze these authors. In the Appendix, I also add a list of characters in Heliodorus’ *Aethiopica*, along with a few words on their particular role in the story – a great many characters play a role in the story, and this overview will help readers better understand the examples I provide in my dissertation.

Basil the Great's (probably 329/330-379) *Hexaemeron* ('The Six Days'; probably delivered in 378 (Bernardi 1961)) is a commentary on the biblical book *Genesis* – more specifically, on the first six days of creation. The entire book follows the same pattern – Basil gives a verse from *Genesis* 1 and proceeds to discuss every aspect of it exhaustively. His goal, especially in the first four homilies (of nine in total), is “to encourage a more literal understanding of the early chapters of *Genesis* among his congregation”, as opposed to the allegorical interpretations which had taken hold around this time (Loopstra 2010: 146). It is almost 36,000 words of hard work – the subject matter is dense and sometimes quite frankly boring (the entire first homily, some 4000-odd words, deals with ‘In the beginning God created the heaven and the earth’). The Greek is often difficult. Basil's perspective on some topics (especially women – see the passage at VII.5.39-44) do more than raise the reader's eyebrows. At the same time, the *Hexaemeron* contains several beautiful passages (his examples which demonstrate the relativity of distance are great (VI.9) – especially the image of the ‘white sails above the dark-blue sea’ (λευκοῖς ἰστίοις ὑπὲρ κυανῆς [...] θαλάσσης) at VI.9.50-51, which is almost Homeric); he provides a wonderful window on early Christian views of the first chapter of *Genesis*; and you sometimes cannot help but be swept along with Basil's enthusiasm (there are several moments when he says he has to stop because he has lost track of time or because it's already dark outside).

Gregory of Nazianzus's (probably 329/330-390) *Contra Iulianum* (more prosaically known as *Orations* 4 and 5; probably written “in late 364 or early 365” and “late 365 or early 366”, respectively (Elm 2012: 342)) are two invectives against the emperor Julian ‘the Apostate’ (emperor from 361 to 363), whose reign constituted one of the most pressing challenges to the spread of Christianity when it was still in its infancy. Julian's *School Edict* attempted to remove Christian teachers from their posts, cutting children off from exposure to Christian principles at a time when they are most impressionable. The reasoning behind the *Edict* was that Greek language was inextricably bound up with Ancient Greek religion (i.e., polytheism), and, hence, that teaching the *Odyssey*, for instance, was reserved for pagans. As Elm puts it (2012: 141), the gist of Julian's edict was “that teachers may teach only matters in which they also believe”.¹ In other words, Christians were now cut off from the “foundational writings” of the empire's “common Greekness and Romanness, the universal foundation of Rome's greatness” (id.: 142).² Gregory's *Contra Iulianum* are a reaction to this line of reasoning in particular, and they are not just chock-full of vitriolic attacks on Julian's policies, but more generally amount

¹ Although, as Elm (2012: 141) points out, this directive was only added later, when Julian “issued an imperial letter” with “the force of law” to supplement the *Edict*.

² See Elm (2012: 139-143) for further discussion of the *Edict*.

to a full-blown character assassination (Van Dam 2002: 195) – his “aim was to make Julian lose face” (Elm 2012: 340; 347). Julian’s general argument revolves around the “distinction between Hellenes as Greek-speakers and Hellenes as pagans”, in that he argues, against Julian, that “Greek culture belonged to the former rather than the latter” (Van Dam 2002: 197).³

Heliodorus of Emesa (Homs today) probably wrote the *Aethiopica* (‘Ethiopian Story’) between 350 and 360 (Morgan 1997: xiv).⁴ It is one of the few surviving examples of the Ancient Greek novel, which is – although not an “ancient generic concept” and not distinguished by any clear formal criteria (Whitmarsh 2008: 3; De Temmerman 2014: 2, fn. 5) – centered around a few common themes:

“Typically, two beautiful and noble young people fall in love at first sight, are somehow separated and travel around the world in search of one another, experiencing adventures which usually include shipwreck, bandits or pirates, the unwanted sexual attentions of third parties and apparent death, remaining true to each other through all their ordeals, until eventually they are reunited and implicitly live happily ever after.” (Morgan 1997: xix; also Whitmarsh 2011: 112)

As Whitmarsh (2008: 6) notes, however, every novel is defined by its own “idiosyncratic, sophisticated, playful and ethically complex” character. The *Aethiopica* is the final of the five more or less complete Ancient Greek novels handed down to us, along with Chariton’s *Callirhoe*, Xenophon’s *Anthia and Habrocomes*, Achilles Tatius’ *Leucippe and Clitophon* and Longus’ *Daphnis and Chloe*. It has been called “easily the most sophisticated and complex” of the Ancient Greek novels (Morgan 1997: xxi), and “arguably” the “greatest” novel of antiquity (Whitmarsh 2011: 109). Heliodorus is “a master [...] of Greek prose style” – his narrative “full of rhetorical tropes”, his language “deployed with an exuberant virtuosity” (Morgan 2014: 267). The *Aethiopica* is also “much more narratologically complex” than earlier novels (Whitmarsh 2011: 111), beginning *in medias res* with some bandits eyeing a ship which has stranded on the shore, and which is littered with dead bodies. The “earlier parts of the story” are filled

³ See Elm (2012: 336-477) for an exhaustive, more historically-oriented analysis of the *Contra Iulianum*.

⁴ There are serious questions about the date of the *Aethiopica* (and, more generally, Heliodorus himself). Scholarship has placed Heliodorus as early as the reign of Hadrianus (117-138) and as late as 350 (Morgan 1997: xvii). Morgan (as well as Whitmarsh (2001: 86; 2011: 109)) argues in favor of a 4th-century date for the *Aethiopica* due to the “striking similarities between the siege of Syene described in Book 9 of the novel and the third siege of Nisibis by the Parthians in AD 350, as recounted in two panegyrics of the emperor Constantius written by the future emperor Julian the Apostate” (ibid.). See De Temmerman (2014: 2, fn. 4) and Morgan (1997: xxvii-xxviii, fn. 1) for further references; also Whitmarsh (2008: 381). I follow these scholars, and assume that the *Aethiopica* is a 4th-century text.

in “through embedded secondary narratives by characters”, a clear nod to the macro-structure of Homer’s *Odyssey* and just one of the many intertextualities with the canon of (pre-)Classical literature (Morgan 2014: 267-8).⁵ There are clear references to tragedy (see also Paulsen 1992), Menander, Herodotus and Plato’s *Phaedrus* – as Morgan puts it, “the novel is obsessively and deliberately self-positioned within the classical literary tradition” (2014: 270).⁶ In what follows, I’ll give a brief overview of the narrative – many examples require at least an awareness of the main outlines of the story, and all of them benefit from it (see the Appendix for more on the various characters in the *Aethiopica*).

Theagenes and Chariclea, the protagonists of the story, are found on board of a ship littered with bodies by a band of brigands, who are led by Thyamis. They are taken to the bandits’ camp, where they meet Cnemon, a fellow Greek. When Thyamis and his men are attacked by a rival band of bandits, Chariclea, Theagenes and Cnemon manage to escape. All three are separated – Chariclea is taken in by the merchant Nausicles, who had hired a Persian prefect to attack Thyamis’ bandits in search of another woman; this prefect sends Theagenes to his commander, the satrap Oroondates. Cnemon meets up with Calasiris, an Egyptian sage, who tells him a long story about how he came to be the guardian of two young Greeks – Theagenes and Chariclea. This story contains a further embedded story told by Charicles, the priest of Apollo at Delphi, to Calasiris. In this second-order embedded story, Charicles explains how he was given Chariclea by an Ethiopian envoy, and raised her as his own daughter. She became a ministrant maiden of Artemis at Delphi.

Theagenes, for his part, came to Delphi for the celebrations for the hero Neoptolemus. He and Chariclea fell in love immediately, but since Chariclea was betrothed to another man, they could not be together. Calasiris, getting to know both Chariclea and Theagenes during this time, finds out that Chariclea is actually the daughter of the Ethiopian queen Persinna. Persinna had given birth to a white daughter – since both she and her husband Hydaspes are Ethiopian and hence black, and she foresaw that this would lead to accusations of adultery, she gave away her daughter. Much later, Calasiris stayed at the Ethiopian court before he came to Delphi, where Persinna begged him to search for her lost daughter and bring her home. Chariclea, infatuated with Theagenes, asks Calasiris to help them escape Delphi. The three of them manage to find a Phoenician ship to take them away; however, they are boarded by a group of pirates. Their leader, Trachinus, aims to marry Chariclea, but a fight breaks out over the division of the booty, resulting in a massacre and the eventual shipwreck with

⁵ Whitmarsh (2011: 114) goes so far as to say that the *Aethiopica* “can be read as the *Odyssey* that Homer would have written had he lived his days on the fertile banks of the Nile”.

⁶ For more on these intertextualities, see Morgan (1997: xxii-xxiii; 2014: 267-270); also Hilton (2001) and De Temmerman (2014: 247-289).

which the *Aethiopica* begins – as well as Calasiris becoming separated from Theagenes and Chariclea.

Back in the main story, Calasiris manages to find Chariclea again, and they go in search of Theagenes. They eventually find him at Memphis, where he had arrived with Thyamis. Thyamis and his brigands had regrouped after their earlier defeat and ambushed the Persian prefect's troops at the village of Bessa, had taken Theagenes from the Persians, and had turned towards Memphis, which was only lightly defended. At the gates of Memphis, Thyamis calls out his brother Petosiris, who had taken the city's priesthood from Thyamis through deception. They fight out a duel for the priesthood of the city. Calasiris arrives with Chariclea and tries to stop the fight – it turns out both men are his sons. He succeeds and dies a peaceful death shortly afterwards; Theagenes and Chariclea, reunited but distraught over their guardian's death, are invited to stay with the wife of Oroondates (the Persian governor), Arsace. She falls in love with Theagenes and schemes with her servant, Cybele, to make Theagenes fall in love with her. Theagenes, who had acted as if he and Chariclea were sisters, remains loyal to Chariclea, however, and announces that he and Chariclea are actually promised to each other. Arsace is driven to kill herself due to his rejection.

Cybele's son, Achaemenes, who was slated to marry Chariclea before the revelation that she and Theagenes were already betrothed, rides to Oroondates and informs him of his wife's licentiousness, as well as Theagenes' role in the matter; he also inflames the satrap's passion for Chariclea, describing her as the most beautiful woman he had ever seen. Oroondates sends his emissary to Memphis to retrieve Theagenes and Chariclea, which he does. Near the city of Syene, Theagenes and Chariclea's party is ambushed by a group of Ethiopian warriors. Shortly afterwards, a battle for Syene breaks out between Hydaspes, the king of the Ethiopians and husband of Persinna, and Oroondates – the latter is defeated and captured, and Theagenes and Chariclea are brought before Hydaspes as prisoners of war. Chariclea tries to convince Hydaspes that she is actually his son – despite the latter's reservations, the evidence turns out to be overwhelming and Chariclea is recognized as the royal couple's child. The tale ends with a coronation at Meroë, the capital of Ethiopia – Theagenes and Chariclea are invested with the priesthood and finally manage to marry each other.

Let me now turn to the matter of why I chose to look at these texts, and why I chose to look at (these) DMs. I'll answer each of these questions in turn.

The first argument for why I chose to look at these texts is, paradoxically enough, the fact that I felt I had to defend my corpus in the first place – let's call this the 'Romantic Argument'. Ancient Greek linguistic research – and Ancient Greek DM research in particular – is almost exclusively focused on the same set of texts (with some notable exceptions – see e.g. Loudová 2009a, b; Soltic 2014; Bentein 2016). This set includes Homer, Herodotus, Plato, Lysias, the tragic playwrights of Classical Athens and (sometimes) Demosthenes. Even if an analysis does stray from these 'standard' authors,

Classical Greek is usually still the object of interest (see Black (2002: 19) on this very point).

There are two points I wish to make here. The first is that this narrow focus is both unfortunate and peculiar, as we have only a few book shelves' worth of literary material to read in Ancient Greek (broadly defined as everything from Homer until early Byzantine Greek). Why would we then choose to exclude a not insignificant chunk of surviving texts from our linguistic consideration? There are, to my knowledge, little to no linguistic analyses of the works under consideration here – not just little to no DM analyses, but linguistic analyses in general. The analysis here can be regarded as an attempt to open up Ancient Greek scholarship and expand our view to encompass forgotten or un(der)appreciated texts.⁷ The *Hexaameron*, *Contra Iulianum* and *Aethiopica* are intellectually stimulating and stylistically first-rate, and they deserve better than to sit unread while Plato or Homer receives its umpteenth DM analysis. That is not to say, of course, that Plato or Homer are less interesting – my argument here is simply that there are other texts which deserve scholarly attention as well.

The second point I want to make here in relation to the Romantic Argument is that all three authors under consideration were Atticists. Gregory, Basil and Heliodorus were clearly well-educated, and they were all versed in the (pre-)Classical models which were a staple of post-Classical education in the Greek-speaking world (Homer, Demosthenes, tragedy, Plato, and so on). Most scholars accept that this 'classical' education had deep-rooted effects on the language, style and structure of their texts.⁸ In that sense, the

⁷ Especially from a linguistic point of view – there is an excellent tradition of literary scholarship on the Ancient Greek novel. See e.g. the different contributions in Whitmarsh (2008); also De Temmerman (2014), and references cited there.

⁸ See Bowie (2012: 654) and Whitmarsh (2011: 10) on Heliodorus' Atticism; see De Temmerman (2014: 247, 261-264, 288, 297-298) on parallels between the *Aethiopica* and the Homeric epics and Morgan (1997: xxi) on the parallels with Attic tragedy. Elm (2012: 341), Webb (2008: 64-65), Schwab (2012: 156), Demoen (1993: 84-86), Kennedy (1999: 164) and Bartelink (1986: 36) discuss (usually briefly) the influence of the pagan and mostly Classical education on Gregory. Gregory's Atticism is also apparent in the very subject matter of the *Contra Iulianum*, which amounts to a full-throated defense of the value of a 'Classical' education (cf. Schwab 2012: 160-161). See Cribiore (2007: 2), Schwab (2012: 161) and Demoen (1993: 84) on the influence of the pagan and mostly Classical education on Basil; also Goldhill (2006: 230-231) on Libanius, who was most likely Basil's teacher (Cribiore 2007: 151). Deferrari, who states that "if we may compare Basil's Greek with that which we know as Attic, we can say that the resemblance is very close" (1918: 586), draws parallels between Plato's *Timaeus* and Aristotle's *History of Animals* on the one hand, and the *Hexaameron* on the other (1918: 583); he also points to several Classical references in Basil's letters – for instance, to Alcinous and Odysseus in *Letter LXXIV* (1918: 586). Kennedy (1999: 163, 166) – who calls Basil and Gregory "masters of Greek prose" – has some words on Gregory and Basil's familiarity with Classical Greek (cf. also Bartelink 1986: 17, 58; Rapp 2005: 186). Penner & Vander Stichele (2006: 248, 254) offer some interesting remarks on the influence of Classical rhetoric on early Christian education in general. Finally, Basil and Gregory were close friends – they studied together and, later on, exchanged many letters. Basil is considered to be Gregory's philosophical mentor, and he tried to

conclusions which will be drawn here may be applicable to earlier (i.e., Classical) Greek. This is a dangerous game to play, of course – there is still a large gap between the fourth century AD, the period in which these texts should be situated, and the fifth and fourth centuries BC, for instance. It would be interesting to look at differences and parallels between DM use in these different stages of Greek, but that type of analysis would require an additional dissertation. What is clear is that the texts considered here are quite close to Plato or Demosthenes lexically, morphologically and syntactically – there is no reason to assume *a priori* that δέ, γάρ and οὐν would then have undergone dramatic shifts in their core meaning or function in the intervening time frame. As far as I know, there is no study which argues that δέ, γάρ and οὐν developed new meaning or functions over time. Egea (1990: 294) notes that these DMs disappeared from spoken Greek over the course of the Koine period⁹, which would point to a stable function – if δέ, γάρ and οὐν were not part of the spoken language, but only of an atavistic, literary, ‘Atticistic’ Greek, then those DMs would presumably have preserved their original meaning. That said, this is only a secondary (or even tertiary) consideration – this dissertation should be considered to be a self-contained, independent study first and foremost, and any extrapolations of its conclusions to other authors or periods of Ancient Greek should be made carefully.

Another consideration which led me to examine these texts is what I would call the ‘Blank Slate Argument’. The Blank Slate Argument is contiguous to the Romantic Argument, but is not as subjective. Rather than seeing the lack of secondary literature on Gregory, Basil and Heliodorus as a hindrance, I choose to consider it an asset. As there is no existing scholarship on these texts, there is no way in which it could influence my account in either a negative or a positive sense. In the former case, I would perhaps be inclined to try and debunk it; in the latter case, I would perhaps be inclined to agree with it. One way or the other, my own analysis would be encumbered from the outset. This is not necessarily a bad thing, but it can sometimes be tempting to remain stuck in a certain way of thinking. Let’s say it was commonly agreed that a certain DM marked a clause as being an ‘explanation’. Maybe I wouldn’t agree with that analysis, but it could (consciously or unconsciously) still influence my own analysis in that I would perhaps parse that clause as being an ‘elaboration’. An ‘elaboration’ would be different from an ‘explanation’, but the framework would remain the same – the DM

persuade the latter to join him in his retreat at Annesi (Elm 2012: 221); he also “consecrated Gregory as bishop of Sasima in 372”. Gregory delivered Basil’s funeral oration (Oration 43) in 382 (id.: 157). As such, they may have influenced each other’s idiolects (although this will probably have to remain conjecture at best).

⁹ See also Horrocks (2010²: 250), who notes that there are almost no traditional DMs in the work of the 6th-century Byzantine writer John Malalas – though see Loudová (2009a) for a discussion of newly developed DMs in Malalas. See Soltic (2015: 193-194) for further discussion.

would still point to a certain relation between clauses. Maybe it would be better to look for its meaning and function in a totally different direction. This different direction might rear its head more quickly if we can look at texts without being burdened by earlier scholarship. My texts amount to uncharted territory in this sense, and hence offer me a blank slate – while the existing consensus on the function and meaning of δέ, γάρ and οὐν (cf. *infra*) might be taken to apply to all instances of these DMs (including the ones in my texts), this is still different from taking on an argument which is tailored to specific texts.

A final argument for why I chose these texts specifically (and not other fourth-century texts, for instance) is that I wanted to have a mix of argumentative and narrative texts (or, in Sperber's (2001a) terms, 'argumentation' and 'testimony', respectively). I aim to have my conclusions apply to as broad a swathe of the Ancient Greek literary landscape as possible, and looking at two different types of texts is one obvious way to do this. This last argument is what I would call the 'Diversity Argument'.

The Romantic and Blank Slate Arguments led me to consider Post-Classical Greek; the Diversity Argument led me to consider both argumentative and narrative texts. The reason why I chose the *Hexaameron*, *Contra Iulianum* and *Aethiopica* in particular is simply that these texts seemed intriguing to me. The *Hexaameron* offers a fascinating window on early Biblical exegesis, while the *Contra Iulianum* is one of the most important texts on the dichotomy between the pagan heritage and Christian beliefs in early Christianity, and especially on Julian's attempt to exclude Christians from teaching positions (see e.g. Demoen 1993: 105-108). The *Aethiopica*, finally, is a novel which immediately grips the reader's attention with its gruesome opening scene *in medias res* (cf. *supra*). It is a delightful tale which includes lagoon battle scenes, a dastardly stepmother who tries to seduce her stepson, a horse-mounted chase of a runaway bull, and even a giraffe (or 'camel-leopard' (καμηλοπάρδαλις)). This dissertation, then, can also be partly construed as a call to integrate (parts of) these texts into university curricula – they have so much to offer in terms of style, intertextual references and sheer entertainment value.¹⁰ Especially that giraffe scene.

The next question is why we should be interested in DMs at all. Many scholars have pointed to their importance for utterance interpretation¹¹:

¹⁰ Though if you're looking for this latter trait, I would perhaps steer clear of the *Hexaameron*. To each his or her own, I suppose.

¹¹ The following quote is concerned with 'particles', a set of linguistic items which does not necessarily overlap with the set containing DMs (see Part 1 *infra* for more details). For the purposes of this Preface, however, the remarks made by Wierzbicka here apply to DMs as well.

“There are few aspects of any language which reflect the culture of a given speech community better than its particles. Particles are very often highly idiosyncratic: ‘untranslatable’ in the sense that no exact equivalents can be found in other languages. They are ubiquitous, and their frequency in ordinary speech is particularly high. Their meaning is crucial to the interaction mediated by speech; they express the speaker’s attitude towards the addressee or towards the situation spoken about, his assumptions, his intentions, his emotions. If learners of a language failed to master the meaning of its particles, their communicative competence would be drastically impaired.” (Wierzbicka 1991: 341; cited in Aijmer 2002: 1)

Moreover, research on DM has led to some fascinating insights on the semantics/pragmatics border wars (Horn 2005) as well as the truth-conditional/non-truth-conditional division (Pons Bordería 2008; Blakemore 2002). They have also given rise to some interesting hypotheses on how lexical information is stored from a cognitive point of view (e.g. Curcó 2011). The debates here are still very much ongoing, and an in-depth discussion of these issues can be found in Part 1 of this study. Although I am dealing with monosyllabic words and linguistically underanalyzed texts, then, I hope that the picture I’m about to paint will be of interest to a wide audience.

List of abbreviations

Aeth. = *Aethiopica* (*Ethiopian Stories*)

Bas. = Basil the Great

DM = discourse marker

Greg. = Gregory of Nazianzus

Hel. = Heliodorus

Hex. = *Hexaemeron* (*The Six Days*)

Iul. = *Contra Iulianum* (*Invectives Against Julian*)

LSJ = Liddell, Scott & Jones dictionary (see bibliography for full reference)

RST = Rhetorical Structure Theory

RT = relevance theory

tr. = translation

List of Tables

Table 0.1	Instances & frequency of δέ, γάρ and οὖν in corpus	1
Table 0.2	Instances & frequency of δέ, γάρ and οὖν in other texts	3

List of Figures

Figure 1.1 Hierarchical structure of (18)	30
Figure 4.1 Explanation and elaboration hypotheses	257

Table of Contents

Introduction	1
<i>Part 1 The case for a relevance-theoretic framework.....</i>	<i>7</i>
Chapter 1 Towards coherence: An exploration of existing accounts of δέ, γάρ and οὖν.....	9
1.1 A historical overview of Ancient Greek particle research.....	10
1.1.1 Stage I: σύνδεσμοι.....	11
1.1.2 Stage II: particles	17
1.1.3 Stage III: coherence and discourse markers.....	23
1.2 The current approach to δέ, γάρ and οὖν: a summary	48
Chapter 2 What's eating coherence theories – and how to fix it	51
2.1 The Problems of Unfounded Coherence and Unfounded Connectivity	52
2.1.1 Low interrater agreement.....	53
2.1.2 Internecine disagreement: descriptive inadequacy.....	55
2.1.3 Terminological and definitional vagueness	58
2.1.4 No differentiation between semantic contribution of DM and the context in which it occurs.....	60
2.1.5 Coherence is not a necessary or sufficient prerequisite for utterance understanding	64
2.1.6 Psychological implausibility	70
2.2 The Problem of Non-Truth-Conditional Meaning	78
2.3 Towards a solution for the Three Problems	83
2.3.1 The Problem of Unfounded Coherence: on linguistic underdeterminacy and intentionality	83
2.3.2 The Problems of Connectivity and Non-Truth-Conditional Meaning: on implicatures and procedures	118
2.4 A new approach to Ancient Greek DMs.....	139

Part 2 Applying the relevance-theoretic framework	141
Chapter 3 A relevance-theoretic analysis of δέ's semantics	143
3.1 Existing approaches to δέ.....	143
3.1.1 Stage II approaches to δέ: contrast, addition, change	144
3.1.2 Stage III approaches: on Bakker, Black and discontinuity	148
3.2 Taking a fresh look at δέ: a relevance-theoretic approach	159
3.2.1 On δέ's basic value: between discontinuity and continuity	160
3.2.2 Procedural or not?	167
3.2.3 Towards a procedural rule for δέ.....	175
3.3 Conclusions.....	237
Chapter 4 A relevance-theoretic analysis of γάρ's semantics	241
4.1 Existing approaches to γάρ	241
4.1.1 Stage II approaches to γάρ: causality, explanation, motivation, confirmation,	242
4.1.2 Stage III approaches to γάρ: explanation, elaboration, subsidiarity	245
4.2 Towards a procedural rule for γάρ: problems and perspectives	248
4.2.1 Problems with existing accounts	249
4.2.2 Procedurality	266
4.2.3 Γάρ in the wild: a journey through its different contexts.....	268
4.2.4 Tying everything together.....	299
4.2.5 A loose end: ἀλλὰ γάρ.....	312
4.3 Conclusions.....	317
Chapter 5 A relevance-theoretic analysis of οὖν's semantics.....	323
5.1 Existing approaches to οὖν	323
5.1.1 Stage II approaches to οὖν: progressive, inferential, resumptive	324
5.1.2 Stage III approaches to οὖν: POPping in	328
5.2 Towards a procedural rule for οὖν: problems and perspectives.....	332
5.2.1 Problems with existing accounts	332
5.2.2 Procedurality	346
5.2.3 Folding the different contexts into one: οὖν and mutual manifestness	347
5.2.4 Comparing οὖν and δέ: additional support for the mutual manifestness hypothesis	364
5.2.5 Tying everything together: proposing a procedural rule for οὖν	388
5.2.6 A loose end: the γὰρ οὖν collocation. A reaction to Bakker (2009).....	397
5.3 Conclusions.....	403

<i>Part 3 Looking back – and ahead</i>	409
General conclusions	411
Bibliography	425
Appendix: List of characters in the <i>Aethiopica</i>	447

Introduction

The *raison d'être* of this dissertation is my belief that existing accounts of δέ, γάρ and οὖν are fundamentally lacking. In terms of sheer numbers, these items occur so frequently in most texts which are of interest to Ancient Greek linguists that it would, then, seem a good idea to take another look at their meaning. They are quite prevalent in my corpus as well, as the table below bears out:

Table 0.1 Instances & frequency of δέ, γάρ and οὖν in corpus

<i>Text</i>	δέ (total instances)	δέ (frequency ¹)	γάρ (total instances)	γάρ (frequency)	οὖν (total instances)	οὖν (frequency)
<i>Hexaemeron</i> (35,834 words)	544x	0.15	310x	0.086	90x	0.025
<i>Contra Iulianum</i> (18,851 words)	428x	0.23	185x	0.098	57x	0.03
<i>Aethiopica</i> (80,126 words)	1870x	0.23	535x	0.067	217x	0.027

¹ Number of times a word occurs, divided by the total number of words.

These numbers are not the result of randomness or a preference of these authors for these DMs – οὖν and (especially) δέ and γάρ occur frequently in both Classical and post-Classical authors:²

² A few words on the authors chosen here: Homer, Herodotus (whose Ionian dialect has ὄν for οὖν), Plato and Xenophon are traditionally of interest to Ancient Greek linguists (see e.g. the various contributions in Bakker & Wakker (2009)); Xenophon of Ephesus is the “narrative template” for the *Aethiopica* (Whitmarsh 2011: 117) and hence perhaps the closest of all the novels to Heliodorus’ idiolect; John Chrysostom is a contemporary of Basil and Gregory and is considered one of the ‘Three Holy Hierarchs’ in the Eastern Orthodox Church, along with the latter two. Plutarch is “not a strict [A]tticist” – his vocabulary, for example, reflects “his [...] extensive reading of authors from all periods of Greek in prose and poetry” (Swain 1996: 137); as such, his idiolect offers a more eclectic version of Ancient Greek. Both Eusebius and Anna Comnena, finally, are (very) late flowerings of the Atticist wave – Eusebius’ (fl. first half of the 4th century AD) Christian works are teeming with highly educated references to Classical literature (and are hence quite similar to Basil’s and Gregory’s), while Anna Comnena (11-12th century AD) uses an idiolect deeply influenced by Classical Greek (Horrocks 2010²: 155, 238-240).

The samples referred to in the table consist of the following texts:

Plato: *Euthyphro*, *Apology*, *Crito*, *Phaedo*, *Cratylus*, *Theaetetus*, *Sophist*, *Statesman*, *Parmenides*, *Philebus*, *Symposium* and *Phaedrus*.

Xenophon: *Hellenica*, *Cyropaedia* and *Anabasis*.

Plutarch: *Parallel Lives*: *Theseus*, *Romulus* (and their comparison), *Lycurgus*, *Numa* (and their comparison), *Solon*, *Publicola* (and their comparison), *Themistocles*, *Camillus*, *Pericles*, *Fabius Maximus* (and the latter two’s comparison), *Alcibiades*, *Marcus Coriolanus* (and their comparison), *Timeoleon*, *Aemilius Paulus* (and their comparison), *Pelopidas*, *Marcellus* (and their comparison), *Aristides*, *Cato Maior* (and their comparison).

John Chrysostom: *Against Those Who Oppose the Monastic Life*, *Against the Jews*, *On the Statues* (also known as *To the People of Antioch*).

Table 0.2 Instances & frequency of δέ, γάρ and οὖν in other texts

<i>Text</i>	δέ (total instances)	δέ (frequency)	γάρ (total instances)	γάρ (frequency)	οὖν (total instances)	οὖν (frequency)
Homer (199,193 words)	10964x	0.55	1405x	0.07	84x	0.0042
Herodotus (185,472 words)	8040x	0.43	1479x	0.08	452x (ὡν)	0.24
Plato [sample] (187,348 words)	4003x	0.21	2009x	0.11	1323x	0.71
Xenophon [sample] (203,034 words)	8393x	0.41	1439x	0.071	611x	0.03
Plutarch [sample] (165,696 words)	5609x	0.34	1132x	0.07	563x	0.034
Xenophon of Ephesus (16,546 words)	703x	0.42	88x	0.05	43x	0.026
Eusebius, <i>Praeparatio Evangelica</i> (236,015 words)	6569x	0.28	1815x	0.07	751x	0.032
John Chrysostom [sample] (170,906 words)	2199x	0.13	2257x	0.13	522x	0.03
Anna Comnena (145,850 words)	3714x	0.25	940x	0.06	445x	0.03

There is, of course, some variation in the numbers of both tables. For instance, γάρ is much more frequent in the *Aethiopica* than in the two argumentative texts under consideration here, while οὖν is much less prevalent in the *Hexaemeron* than in the other two texts in my corpus (see Table 0.1). Table 0.2 indicates that δέ seems to occur very frequently in earlier narrative texts (Homer, Herodotus) – until you see the numbers for Xenophon of Ephesus (probably first half of the second century AD – see De Temmerman (2014: 118, fn. 1)), in whose novel δέ is equally frequent. Γάρ, on the other hand, occurs relatively infrequently in Homer and Herodotus – it is much more prevalent in Plato and John Chrysostom (a contemporary of Basil and Gregory and fellow Atticist Christian). In this sampling of texts, only Plato, and Herodotus to some degree, have a penchant for οὖν. In texts as disparate (both in terms of chronology and subject matter) as Plato’s philosophical dialogues, Anna Comnena’s Byzantine history and the *Invectives Against Julian*, δέ occurs roughly as frequently; the same can be said for γάρ in Homer, Plutarch and the *Aethiopica*. Οὖν occurs roughly as frequently in the sample from Xenophon, the sample from John Chrysostom and the *Invectives*. In this dissertation, I emphatically do *not* intend to compare, from a macro perspective, the relative frequency of δέ, γάρ and οὖν between different eras (or even between the different authors under consideration in this study). However, I do think that the numbers above bear out, at the most basic and rough-hewn level, the observation that δέ, γάρ and οὖν are not particularly rare or frequent in the texts I have chosen to analyze – compared to earlier Greek, contemporary novelists and theologians, or Byzantine historians.

In discussing these items, I intend to take a qualitative rather than a quantitative approach – following Dik (2007: 30), there is quantity here only in the sense that I discuss a ton of examples in relatively great detail. This is a conscious choice – I approach δέ, γάρ and οὖν as items which are still in need of a well-defined semantic analysis which is as unitary as possible. As such, it makes little sense to construct my analysis along quantitative lines. From this perspective (and to put somewhat bluntly), I assume that it does not really matter how often γάρ occurs with exemplifications, for instance – the most important thing is to recognize that γάρ *can* occur with exemplifications, and to consider the implications for a realistic account of its semantics.

To finish up, some notes on text editions and translations, as well as on abbreviations, transliterations and the general structure of this dissertation. I use the texts from the *Thesaurus Linguae Graecae* (Giet (1968) for the *Hexaemeron*, Migne (1857) for the *Contra Iulianum*, Lumb et al. (1960) for the *Aethiopica*); I provide translations for each example, which are based firmly on existing translations (Jackson (1895) for the *Hexaemeron*, King (1888) for the *Contra Iulianum*, Lamb in Lamb & Morgan (1997) for the *Aethiopica*). In almost all cases, however, I have modified these translations to get what amounts, in my view, to a better representation of the Greek – either because the Greek

in my text editions seemingly differed slightly from the Greek of the translators, or because I felt the translations missed the mark to a greater or lesser degree. In addition, I have also chosen not to provide a translation for δέ, γάρ or οὖν anywhere – even in those cases where there seems to be a very straightforward one available. I do this in order to prevent my readers from inclining towards one view of what these items encode – δέ, for instance, can often be translated as ‘and’ or ‘but’, but it does not necessarily follow that δέ means the same things as *and* or *but* *do* in English (the same is true with *for* for γάρ and *so* for οὖν). The aim is not to manipulate (or, less strongly, guide) the hearer towards my own interpretation of these items’ semantics by offering up a translation which reinforces that interpretation, but to provide the utterances in which these items occur ‘as they are’; to then follow up those examples with my own analysis; and finally trust that this analysis makes sense. The reader should make up his or her own mind as to which translation better fits the context – hopefully it will be one which he or she feels is in line with my analysis. This is a study of the semantics of Ancient Greek expressions, after all, and it is not focused on trying to provide optimal translations.

For non-corpus examples (from Homer or Plato, for instance), I take text and translation from the secondary literature where applicable, or from the editions on the *Perseus*, *Sacred Texts* or *Classical Persuasion* websites (I provide exact references *ad locum*).³ Modifications are much rarer here. The texts in my corpus will be abbreviated henceforth as *Hex.* for the *Hexaemeron* (by Basil, or Bas.), *Iul.* for the *Contra Iulianum* (by Gregory, or Greg.) and *Aeth.* for the *Aethiopica* (by Heliodorus, or Hel.).

Following relevance-theoretic custom, I refer to the abstract speaker/writer with the feminine pronoun (‘she’/‘her’), and to the abstract hearer/reader with the male one (‘he’/‘him’). I will use ‘speaker’ as shorthand for ‘speaker/writer’, and hearer as shorthand for ‘hearer/reader’. I use Latin transcriptions for Greek names (i.e., Heliodorus instead of Heliodoros and *Aethiopica* instead of *Aithiopika*) except where the anglicized version is more common (i.e., Basil instead of Basilius, Gregory instead of

³ For the *Perseus* texts and translations, see

<http://www.perseus.tufts.edu/hopper/collection?collection=Perseus%3Acollection%3AGreco-Roman>. For the *Sacred Texts* text and translation of Herodotus, see <http://www.sacred-texts.com/cla/hh/>. For the *Classical Persuasion* translation of Thucydides, see <http://www.classicpersuasion.org/pw/thucydides/thucydides-jowettoc-b.htm>. Below is a list of the different translations and where I got them, in order of appearance (full references can be found in the bibliography):

Perseus: Kovacs (1994), Lamb (1924), Jebb (1887), Vince (1930), Fowler (1914), Murray (1924), Lindsay (1926), Miller (1914), Robson (1929), Fowler (1921).

Sacred Texts: Macaulay (1890).

Classical Persuasion: Jowett (1900).

Gregorius). Numbered examples start over at the beginning of each chapter, but instances which are taken up again usually retain the original count.

This dissertation is made up of three general parts. The first part (chapters 1 and 2) deals with the framework behind existing accounts of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ – chapter 1 provides an overview of current scholarship, whereas chapter 2 focuses on the problems linked to such an approach and presents an alternative framework, relevance theory. Part 2 (chapters 3, 4 and 5) provides semantic analyses of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ respectively, in line with relevance theory and the variety of contexts in which these items occur. Part 3 contains the general conclusions, where I look back on what I’ve discussed in the previous chapters, and the implications for earlier and future research on $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$.

Part 1

The case for a relevance-theoretic framework

Chapter 1

Towards coherence: An exploration of existing accounts of δέ, γάρ and οὐν

DONALD TRUMP on Kim Jong-Un (fragment of a speech):
He's like a maniac, okay? And you gotta give him credit
[...].

SETH MEYERS: It's not even 'but'! It's not even 'but you
gotta give him credit'!

--- 'A Closer Look' on Late Night with Seth Meyers, 9th of
October, 2016.

Scholarship on δέ, γάρ and οὐν is long-standing. Ancient grammarians and commentators discussed them as 'special' items of the lexicon, fascination with them endured throughout the Renaissance, and the last two decades have seen a tremendous amount of work go into determining what their exact meaning is. Originally regarded as 'conjunctions' or 'particles', they are now usually designated as 'discourse markers' or 'discourse particles'. These labels bring with them certain complications (see Zwicky (1985), Schourup (1999) and Bonifazi (2012) on 'particles', and Fischer (2006b) and Blakemore (2004) on 'discourse particle' and 'discourse marker'), which are representative of the difficulties many scholars have encountered in teasing out their meaning and function. Part 1 of this dissertation deals with these terminological issues, as well as a host of other topics. I will not get into δέ, γάρ and οὐν's phonological and prosodic characteristics – most of the research here is robust and widely accepted, and I really have nothing to contribute in this regard.¹ Instead, I will focus on their semantics

¹ Δέ, γάρ and οὐν are all considered to be phonologically enclitic – they have no accent of their own, and depend on the preceding word for their accent (see Zwicky 1977, 1985). Although all three are written with an accent, this is an orthographic convention (Wackernagel 1892: 377). All three are always located in second position (and, as such, can never begin an utterance) due to a regularity commonly known as 'Wackernagel's Law' (Wackernagel (1892); see also Dover (1960: 12), Marshall (1987: 7-8) and Scheppers (2011: 57) on their

– the main question here will revolve around what they (and items like them) contribute to the utterance. As stated, I will also focus on how, to my mind, existing analyses approach this question from an unsatisfactory point of view. In short, I think the contemporary consensus on $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$'s meaning is psychologically implausible, as well as sub-optimally equipped to deal with the diversity of contexts in which these items can appear.

I assume that the reader is unfamiliar with much of the research on Ancient Greek particles/discourse markers. Every sliver of Greek, both in this chapter and the subsequent ones, is provided with at least a translation (and many also with a short overview of the surrounding context of the utterance). This is a conscious strategy – part 1 functions both as an introduction to scholarship on Ancient Greek particles/discourse markers, and a framework for a new approach to their semantics.

In the first section of this first chapter (§1.1), I present a historical overview of earlier research into Ancient Greek particles (the term I choose to adopt, for now, to refer to a class of items which includes $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ – it will be cashed out theoretically later on); I finish this paragraph with a summary of the present consensus on their meaning. The first part of this dissertation will continue with chapter 2, where I examine the problems associated with this consensus, and present an alternative framework which is able to deal with what I will call the Three Problems linked to the existing framework – and which, in fact, takes these to heart. After that, the table will be set for a more detailed analysis of the particular semantics of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$, which will form part 2 of this dissertation.

1.1 A historical overview of Ancient Greek particle research

In this paragraph, I discuss earlier approaches to Ancient Greek particles (and $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ in particular).² I will divide this existing body of work into three chronological stages. Stage I deals with ancient grammarians' views on these particles – they regarded these items as $\sigma\acute{\upsilon}\nu\delta\epsilon\sigma\mu\omicron\iota$, or 'conjunctions'. Stage II is the 'particle' stage: here, researchers restricted their object of interest to syntactically coordinate connectives

distributional pattern). They can occur together (for example, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ sometimes appear together (Bakker 2009)) – in those cases, they are located in P2 as a group. For more on enclitics and postpositives in Ancient Greek, see especially Fränkel (1964), Janse (1993, 2002, 2008), Fraser (2001), Scheppers (2011), Soltic (2012) and Zakowski (2014a).

² For a more expansive discussion of earlier scholarship of these items, see Bonifazi et al. (2016).

which establish semantico-logical relations. In Stage III, finally, ‘particles’ were reanalyzed as ‘discourse markers’ – connectives which mark the relations between discourse segments and so point to the coherence of the text. Each stage has interesting perspectives to offer for an account of the basic semantics of δέ, γάρ and οὖν, and many of the characteristics discussed here will be relevant for my own analysis.

1.1.1 Stage I: σύνδεσμοι

Aristotle’s *Poetics* includes a discussion about the different ‘parts’ (τὰ μέρη) of language. These are enumerated in ascending order of complexity: first is the letter, then the syllable. The next ‘part’ is what Aristotle describes as the σύνδεσμος (*Poetics* 1456b20-21). This can be translated in its most literal sense as “that which binds together”, according to the LSJ³, but ‘conjunction’ is the usual translation of choice. It is defined by Aristotle as follows⁴:

(1) σύνδεσμος δέ ἐστιν φωνὴ ἄσημος ἣν μὴ ἀρμόττει ἐν ἀρχῇ λόγου τιθέναι καθ’ αὐτήν, οἷον μὲν ἦτοι δέ. ἢ φωνὴ ἄσημος ἢ ἐκ πλειόνων μὲν φωνῶν μιᾶς σημαντικῶν δὲ ποιεῖν πέφυκεν μίαν σημαντικὴν φωνήν.

“A conjunction (σύνδεσμος) is a non-signifying (ἄσημος) expression which it is not fitting to place by itself at the beginning of a phrase-or-sentence (λόγου), such as μὲν ἦτοι δέ. Or: a non-signifying expression whose nature it is to make out of more than one, already signifying, expressions one single signifying expression.”

Although the Greek text is, at best, very obscure and, at worst, hopelessly corrupted (Van Bennekom 1975: 398; Baratin 1989: 20), there are some interesting observations to be made here. The first is that δέ, one of the items under consideration here, is considered a σύνδεσμος. Aristotle does not say anything about γάρ or οὖν, but, given their shared characteristics and subsequent classifications of σύνδεσμοι by Dionysius Thrax and Apollonius Dyscolus (see *infra*), there is some (tentative) reason to believe that these could be included under Aristotle’s definition in (1).

The use of ἄσημος in Aristotle’s definition is interesting as well, as ἄσημος (*asēmos*) is, of course, etymologically related to our term ‘semantic(s)’. Although it is impossible to ascertain to what extent Aristotle’s notion of ‘semantic(s)’ (if he even had a coherent

³ ‘LSJ’ is short for the dictionary edited by Liddell, Scott & Jones (see the exact reference in the bibliography, under ‘LSJ’). It is the dictionary of choice for any Ancient Greek linguist – and particularly for those who study Classical and post-Classical Greek.

⁴ I quote from the restored text in Van Bennekom (1975: 401); the translation is also his.

notion) is comparable to our conception of semantics today, it seems highly likely that, as in Van Bennekom's translation in (1), it means something like 'devoid of sense' (LSJ: "without significance, meaningless"). If this is true, then this would mean that 'conjunctions', in Aristotle's sense, are semantically empty (cf. also Baratin 1989: 20; De Jonge 2008: 141).

According to the second part of Aristotle's definition, a σύνδεσμος is able to connect different expressions which do have a semantic contribution to make, into one single semantic whole (μίαν σημαντικὴν φωνήν). What Aristotle means here is even more difficult to assess – the disjunctive 'or' (ἢ) which precedes this part of the definition is hard to interpret (Fraenkel 1947: 189). Do we get a reformulation of the first part here? Or is this a different definition? If it is the latter, are we dealing with two competing definitions, or two different groups of expressions (as Baratin (1989: 21) seems to assume)? There is no clear answer to these questions. What we can say (probably) is that conjunctions, on this view, can be 'connective' in the most theory-neutral sense: they connect different 'expressions' (φωνῶν) to each other.

Finally, Aristotle seems to indicate that it is impossible to place elements such as δέ at the beginning of a λόγος by themselves (καθ' αὐτήν). While it is, again, dangerous to correlate Aristotle's observation here with modern-day linguistic theory, it is interesting to note that δέ cannot occur as the first element in a clause (see footnote 1 *supra*). Maybe this is what Aristotle is referring to. Maybe it is not.⁵

Another interesting definition of a σύνδεσμος can be found in the grammarian Dionysius of Thrace's *Art of Grammar* (2nd century BC):

(2) σύνδεσμός ἐστι λέξις συνδέουσα διάνοιαν μετὰ τάξεως καὶ τὸ τῆς ἐρμηνείας κεχηνὸς δηλοῦσα. (I.1.86.3)

"A conjunction is a word which connects the meaning/thought (διάνοιαν) with organization (μετὰ τάξεως), and which shows the gap (κεχηνὸς) in the interpretation (τῆς ἐρμηνείας)."

There are a couple of interesting tidbits here. The connective function which we already encountered in (1) is still present here, but it is now not related to words (φωνῶν) but to the 'thought' (διάνοιαν) of the utterance specifically. Although it is (once again) unclear what is meant here exactly, Baratin (1989: 32) argues that Dionysius refers to what would today be called the 'cohesive' function of conjunctions: they connect different utterances to each other (see §1.1.3.1 on the modern-day notion of linguistic 'cohesion'). On this view, a σύνδεσμος binds together semantic units

⁵ See Van Bennekom (1975) for more on this part of the *Poetics*.

(‘ideas’) and not purely linguistic ones (such as phrases or clauses). But the reading is once again uncertain, and we should once again guard against interpretations which would correspond too closely with modern linguistic theory on these σύνδεσμοι.

Another interesting addition is μετὰ τάξεως. Baratin’s view (ibid.) is that Dionysius points to the organizing function of conjunctions here – they do not just connect the ‘thought’, but organize it as well. Presumably this would mean (although Baratin is not explicit here) that Dionysius means that these conjunctions organize the thought *hierarchically*, marking some part of the διάνοιαν as being somehow ‘more important’ than another part, for example. Again, it is entirely possible that we are reading too much into these lines.

A third element is the last part of the definition in (2). According to Baratin (1989: 38), Dionysius here refers to the implicit connections between different parts of the text – what the conjunction ‘shows’ (δηλοῦσα), on his interpretation, is, for example, a causal connection between two segments. The ‘gap’ (κεχηνὸς) which would be made explicit by the conjunction in this example, would be that of the implicit causality between the utterance preceding γάρ, and the utterance marked by γάρ. If Baratin’s interpretation is right, Dionysius’ conception of these conjunctions would be contiguous to a large number of modern-day analyses of these items (as we will see below).⁶

Dionysius also presents a classification of the different types of σύνδεσμοι. They can be divided among eight different categories (I.1.87.1-I.1.100.2; cf. also Baratin 1989: 62-63):

(3) a. συμπλεκτικοί are those conjunctions which connect different parts of the text. One example is δέ, but καί (‘and’) and ἀλλά (‘but’) are placed here as well.

b. διαζευκτικοί are similar to συμπλεκτικοί in that they connect different parts of the text, but they also separate ‘one thing from another’ (ἀπὸ δὲ πράγματος εἰς πρᾶγμα διιστᾶσιν). The prime example here is the disjunctive ἢ (‘or’).

c. συναπτικοί ‘signify implication’ (σημαίνουνσι [...] ἀκολουθίαν). Conditional εἰ (‘if’) is one of these: if the proposition marked by εἰ is true, then the proposition following εἰ should be true as well. This is an example of a material implication. The συναπτικοί, then, mark a hypothetical situation from which an implication would follow in the apodosis.

d. παρασυναπτικοί are very similar to the συναπτικοί. Whereas the συναπτικοί mark hypothetical situations, the παρασυναπτικοί point to a situation grounded in fact.

⁶ Ancient commentators took τὸ κεχηνὸς to refer to the clash of two vowels immediately following each other, which was “judged to be a stylistically unpleasant effect” (Sluiter 1997: 238). On this view, σύνδεσμοι would allow the speaker (or writer) to avoid hiatus. However, Sluiter finds Baratin’s interpretation “convincing” as well (ibid.).

Causal ἐπεὶ ('because'), for example, indicates that the utterance it marks actually happened – but it is still a preliminary for an apodosis (cf. de Kreij (2014: 340) on Apollonius Dyscolus' definition of the παρασυναπτικοί).

e. αἰτιολογικοί, as their name suggests (αἰτία means 'cause'), are the conjunctions which indicate some kind of causality, but which seem to be more goal-directed than the παρασυναπτικοί. As an example, ἵνα points to a purposive clause ('so that') instead of a plain cause.

f. ἀπορηματικοί are used when the speaker is in doubt. Examples include ἄρα and μὲν, which are difficult to translate properly.⁷

g. συλλογιστικοί mark conclusions and summaries of 'demonstrations' (ἀποδείξεων). The implication of a *modus ponens* argument, for example, can be marked by τοίνυν ('therefore'), which is one of the examples cited by Dionysius.

h. παραπληρωματικοί, finally, are those conjunctions which are used for metrical reasons or in order to 'decorate' (κόσμου ἔνεκεν) the text (see also Sluiter 1997: 243-244). One of the conjunctions under consideration, οὖν, is placed here by Dionysius.

It should be noted that γάρ is nowhere to be found among these categories. Apollonius Dyscolus, however, adds γάρ to the examples of the αἰτιολογικοί in his *On Adverbs* (II.1,1.199.19-20; cf Baratin 1989: 104-105) – as such, γάρ would indicate some sort of causality, as it seems to do in e.g. (4):

(4) φεύγωμεν σὺν νηυσὶ φίλην ἐς πατρίδα γαῖαν·
οὐ γὰρ ἔτι Τροίην αἰρήσομεν εὐρυάγυιαν. (Homer, *Iliad* 9.27-28)
"Let us flee with our ships to our dear fatherland;
not [gar] yet will we take Troy with its wide streets." (my translation)

In (4), Agamemnon is talking to his soldiers, trying to convince them to leave (as part of a ruse). The utterance marked by γάρ provides a reason as to why they should flee – if there is no hope that Troy can be taken, there is no reason to stay there. A fitting translation for γάρ here would be 'since', which is causal in English as well, of course (cf. Breul 2007).⁸

Δέ can indeed function as one of the συμπλεκτικοί, as Dionysius suggests:

⁷ For the purposes of this dissertation, they are not really relevant either.

⁸ In *On Syntax*, Apollonius states that σύνδεσμοι 'display' (παρεμφαίνουσιν) 'their own force' (τὰς ἰδίας δυνάμεις) for the 'organization' (τάξεις) or 'succession' (ἀκολουθίας) of words. Like Aristotle, he gives δέ as an example (*On Syntax* 1.14; see Lallot 1997: 99-100 for text and (French) translation). This would seem to suggest that Apollonius assumed that conjunctions do contribute their own (ἰδίας) meaning to the utterance – again, it is difficult to assess what these ancient grammarians meant exactly.

(5) ὥς δ' ἐγερθῆναι τὸν Ἡρακλέα, δίζησθαι, πάντα δὲ τῆς χώρας ἐπεξελθόντα τέλος ἀπικέσθαι ἐς τὴν Ὑλαίην καλεομένην γῆν· ἐνθαῦτα δὲ αὐτὸν εὐρεῖν ἐν ἄντρῳ μιξοπάρθενον τινά, ἔχιδναν διφυέα, τῆς τὰ μὲν ἄνω ἀπὸ τῶν γλουτῶν εἶναι γυναικός, τὰ δὲ ἔνερθε ὄφιος. (Herodotus, *Histories* 4.9.1-5)

[Heracles is in the land of the Scythians; he has lost the mares which were drawing his chariot, but decided to get some rest before looking for them.] “Then when Heracles woke he sought for them; and having gone over the whole land, at last he came to the region which is called Hylaea; There [*de*] he found in a cave a kind of twofold creature formed by the union of a maiden and a serpent, whose upper parts from the buttocks upwards were those of a woman, but her lower parts were those of a snake.” (tr. Macaulay 1890)

In (5), δέ seems to connect the next part of the story to what has gone before: the narrator has just described how Heracles arrived in Hylaea, and δέ marks the transition to his next step – in Hylaea, he finds a monstrous creature in a cave. There is no disjunction, implication, cause, doubt or conclusion here, and no reason to embellish or complete the metrical scheme. The most natural, intuitive translation seems to be *and*⁹; another option is to leave δέ untranslated.

On the other hand, οὖν seems to do something more than just ‘embellish’ or ensure metrical integrity:

(6) δέδοικά σ', οὐδὲν δεῖ παραμπίσχειν λόγους,
μή μοί τι δράσης παῖδ' ἀνήκεστον κακόν.
συμβάλλεται δὲ πολλὰ τοῦδε δείγματα·
σοφὴ πέφυκας καὶ κακῶν πολλῶν ἴδρις,
λυπῇ δὲ λέκτρων ἀνδρὸς ἐστερημένη.
κλύω δ' ἀπειλεῖν σ', ὥς ἀπαγγέλλουσί μοι,
τὸν δόντα καὶ γήμαντα καὶ γαμουμένην
δράσειν τι. ταῦτ' οὖν πρὶν παθεῖν φυλάξομαι. (Euripides, *Medea* 282-289)

[Medea has asked Creon why he is exiling her. His answer:] “I am afraid (no need to dissemble) that you will do some deadly harm to my daughter. Many indications of this combine: you are a clever woman and skilled in many evil arts, and you are smarting with the loss of your husband's love. And I hear that you are threatening – as has been announced to me – to harm the bride, her father, and her husband. These things [*oun*] I will guard against before I undergo them.” (tr. Kovacs (1994), with alterations)

⁹ See Blakemore & Carston (2005: 570-571) on ‘narrative *and*’ – *and* can conjoin two events which took place one after the other; see also Carston (2002a: 222-264).

If οὖν were part of the παραπληρωματικοί, it would not be obvious how it could be translated – it would amount to a metrical or ornamental ‘filler’.¹⁰ Yet there does seem to be some sort of relationship between the preceding discourse and the utterance marked by οὖν: if Creon is afraid that Medea will do harm, it is obvious that he would try to get her as far away from those closest to him. As such, οὖν here seems to fit in more with Dionysius’ συλλογιστικοί – which is how οὖν has been regarded, by and large, from Stage II Ancient Greek particle research onwards. A plausible translation here would be ‘so’, which is often considered to mark conclusions as well (Buysse 2012: 1765).

Different definitions and examples can be found in other ancient grammarians, but the above selection gives a sense of how σύνδεσμοι such as δέ, γάρ and οὖν were regarded in ancient times. To recap, the following traits were felt to be more or less constitutive of δέ, γάρ and οὖν (and hence σύνδεσμοι):

- (7) a. connective: they connect parts of the text to each other in some way (either purely linguistic items such as words, phrases and clauses, or semantic ‘thoughts’).
- b. semantically empty: they have no meaning to contribute of their own.
- c. non-initial: they cannot begin a clause on their own.
- d. hierarchical (possibly): they do not just connect, but organize the different parts of the text as well (although it is not clear how this would work).
- e. explicative (possibly): they make the implicit ‘gap’ in interpretation explicit (possibly by denoting the relation between the different parts of the text).
- f. typology: they are divided into several different categories following their connective function. On Dionysius Thrax’s typology, δέ seems to be ‘connective’ in the most basic sense, while γάρ indicates causality (according to Apollonius, at least) and οὖν is added either because the meter requires a heavy syllable or in order to embellish the text.

However, it is interesting to note that there was disagreement here, especially on the topic of (7b). Although Aristotle argues that σύνδεσμοι are semantically empty, this view was not shared by everyone – “most grammarians thought that this was only true for the σύνδεσμοι παραπληρωματικοί” (De Jonge 2008: 207). This discussion is a preview of what was to come in the early period of Stage II of particle research, which I turn to now.¹¹

¹⁰ See Soltic (2014) for an overview of similar views on γάρ in Byzantine literature.

¹¹ For more on Ancient Greek approaches to σύνδεσμοι, see de Kreij (2016). See Lallot (1998: 231-256) for more on Dionysius’ approach to σύνδεσμοι.

1.1.2 Stage II: particles

Research on these conjunctions picks up again during the Renaissance, starting with the work of Matthaeus Devarius (1588) (Drummen 2015: 17).¹² It is mainly due to Devarius' work that the term 'particle' became entrenched in Ancient Greek linguistic theory (Bonifazi 2012) – his most important contribution for our purposes here lies in his systematic approach to σύνδεσμοι as 'particles' in his *Tractatus de Graecae linguae particulis* (Schenkeveld 1988: 87). In the introduction to his work, he presents his research programme as a discussion of

“some Greek words (*voces*) which by themselves signify almost nothing but which put into combination with other words have a function (*vis*) and contribute *efficacitas* or emphasis, or at any rate, some other quality to speech. Of this nature are those words which are employed as it were as binders of the structure of a sentence or as ties between other sentences.” (tr. Schenkeveld 1988: 88)

In essence, there is nothing new here – Devarius presents these items as being almost non-signifying connectives whose function lies in adding something to the structure of the text. All of these elements can already be found in the works of Aristotle and Dionysius, as we have seen above. Devarius' work is important, though – not only because this is where we begin to see the rise of the term 'particle' to describe these items, but also because Devarius underlines emphatically that particles cannot be deleted from the utterance “without damage”. Their contribution to the utterance is non-straightforward, and removing them results in infelicitous and/or confusing utterances. However, he also “apparently implies that particles do not really belong to the sentence” (id.: 88-89). While their function, then, is to be located apart from the utterances which they mark, it is also non-transparent. They cannot be cut out without damaging the perspicuity of the text, but they also do not really belong to the utterances they connect. In this sense, they cannot be as semantically empty as Aristotle suggests in (1).

Similar considerations can be found in Hendrik Hoogeveen's *Doctrina particularum linguæ græcæ* (1769). He rejects the notion that these particles are “dispensable (*otiosae*)” (Sicking 1993: 5). The idea that non-obligatoriness is a defining characteristic of particles dates back to (at the latest) Dionysius – his παραπληρωματικοί in (3h) do not contribute to the text *per definitionem*, as their only function lies either in metrical harmony or in embellishing the utterance which they mark. Hoogeveen “sets himself

¹² See Loudová (2014: 151-155) for a discussion of Byzantine approaches to particles.

the task of showing that what appears to be superfluous does in reality serve a purpose” (ibid.).¹³ Both Devarius and Hoogeveen push back against the idea that these particles are semantically empty, just as early Greek grammarians did in rejecting Aristotle’s idea of σύνδεσμοι as being ἄσημοι.¹⁴

The next step in particle research is one of the most widely read, oft-quoted and influential works in all of Ancient Greek linguistic research. There is no exaggeration in suggesting that J.D. Denniston’s *The Greek Particles* (1954²) changed the entire paradigm for Ancient Greek particle research, and, although its framework and analyses are outdated (or even obsolete) today, *The Greek Particles* lit the way for Greek particle research for a long time. As such, it warrants a more extensive discussion.

At the start of his book, Denniston attempts to provide a definition of the notion ‘particle’ (1954²: xxxvii):

“Difficult as it is to arrive at a satisfactory definition of particle, an attempt must be made at the outset. I will define it as a word expressing a mode of thought, considered either in isolation or in relation to another thought, or a mood of emotion.”

The particles which ‘express a mode of thought in isolation’, or those which ‘express a mood or emotion’ need not concern us here – they are not connective as δέ, γάρ and οὖν are, and so are less pertinent to the matter at hand. Although items such as ἄν and τοι are particles as much as δέ, γάρ and οὖν are, I am only interested in the latter and, hence, a subset of the category of particles. In what follows, I will designate this subset as ‘connective particles’, as connectivity is their main distinguishing trait.

We are, then, looking at those particles which ‘express a mode of thought in relation to’ another thought. Further on, Denniston reformulates this definition in clearer terms: “their function” lies, he says, in “establishing a relationship between separate ideas” (xxxix). This relationship can be fleshed out by using different particles: a connective particle “may do no more than connect [separate ideas, SZ], but may also give | a logical turn (adversative, causal or inferential) to the connexion [sic]” (xxxix-xl). This separation dovetails nicely with Dionysius’ typology of conjunctions in (3) above – a connective particle ‘which does no more than connect’ would then be an example of Dionysius’ συμπλεκτικοί. A particle which gives a ‘causal turn’ would then belong to Dionysius’ αἰτιολογικοί (e.g. ἵνα), and an ‘inferential’ connective particle would be one of the συλλογιστικοί (e.g. τοίνυν).

¹³ Cf. also De Jonge, who notes that the Stoic philosopher Posidonius (2nd-1st century BC) “had objected to those people who thought that σύνδεσμοι do not indicate [...] anything but merely connect the phrase” (2008: 141).

¹⁴ Fraenkel (1947: 201), on the other hand, still defined a particle as “a word without a meaning.”

So far, so good, except that Denniston adds that he will not discuss “hypotactic conjunctions” such as ἐπεὶ, as “their importance is grammatical rather than stylistic” (1954²: xl). In other words, (syntactically) subordinating particles do not fall under the scope of Denniston’s connective particles – although he does regard them as particles (see also Smyth 1920: 631). On that view, subordinating expressions such as ἐπεὶ, ἵνα and εἰ – which were regarded as full-fledged conjunctions on a par with (paratactic) σύνδεσμοι such as δέ and τοίνυν in Dionysius, as outlined in (3) – are sidelined. A new distinction emerges, based on a grammatical criterion: ‘grammatical’ particles are disregarded, and ‘stylistic’ particles become the sole focus of attention.

Another important addition to the body of work of Stage I of Ancient Greek particle research is that Denniston (1954²: xxxix) underlines that particles are very difficult to translate:

“Often they cannot be appropriately translated into a modern language, and their effect must be suggested by inflexions of the voice in speaking, or by italics, exclamation marks, or inverted commas in writing.”¹⁵

This remark will become important later on – as we will see, it is now assumed that the difficulties encountered in translating particles across many different languages is related to the type of meaning it encodes.

Denniston divides the stylistic connective particles (henceforth, just ‘connective particles’) into four functional categories (1954²: xlvii-l):

(8) a. Additional: “one idea is simply added to another without any indication of a logical relation between the two.” This category is “represented at its purest by καί”, but δέ is also included.

b. Adversative: a subcategorization is made here – there are ‘eliminative’ adversatives, where “the true” is “substituted for the false” (mostly ἀλλά); and there are ‘balancing’ adversatives, “where two truths of divergent tendency are presented” (δέ is a prime example here as well). Denniston adds that the line between these two is blurry, as it is between (8a) and (8b) in general – δέ is “used both to add and to contrast”, i.e., is both an Additional and an Adversative connective.

c. Confirmatory: this type of connective particle “verifies the truth of an assertion” (Misener 1904: 22); later on, Denniston indicates that this use is closely related to the causal use – these particles give “the ground for belief, or the motive for

¹⁵ See also Ostrowiecki (1994: 172), who argues that particles play an essential role in maintaining and enhancing the perspicuity of the text, but notes that their translation is often very challenging.

action” (1954²: 58). This group is “is represented throughout Greek literature by γάρ alone” (1954²: xlix).

d. Inferential: as its name indicates, this type of connective particle points to an inference which is drawn in some way or other; it is represented by, among others, οὖν, which “expresses *post hoc* and (more frequently) *propter hoc*” (1954²: 425). Whereas Dionysius’ classified οὖν as an ‘embellishing’ particle in (3), then, it is reclassified as a more contentful connective particle in Denniston’s typology.¹⁶

Some examples will clarify how these different types are to be understood – that is, how a Dennistonian analysis of δέ, γάρ and οὖν would go:

(9) Ὡς δ’ οὐδὲν ἔτι φορβῆς ἐνῆν ἐν τῷ τείχεϊ, συννήσας πυρὴν μεγάλην ἔσφαξε τὰ τέκνα καὶ τὴν γυναῖκα καὶ τὰς παλλακὰς καὶ τοὺς οἰκέτας καὶ ἔπειτα ἐσέβαλε ἐς τὸ πῦρ, μετὰ δὲ ταῦτα τὸν χρυσὸν ἅπαντα τὸν ἐκ τοῦ ἄστεος καὶ τὸν ἄργυρον ἔσπειρε ἀπὸ τοῦ τείχεος ἐς τὸν Στρυμόνα· ποιήσας δὲ ταῦτα ἐωυτὸν ἐσέβαλε ἐς τὸ πῦρ. (Herodotus, *Histories* 7.107.10-16)

[Boges, a Persian governor, is being besieged by Athenian forces:] “Then when there was no longer any supply of provisions within the wall, he heaped together a great pyre, and he cut the throats of his children, his wife, his concubines and his servants, and threw them into the fire; after [*de*] this he scattered all the gold in the city, and the silver, from the wall into the river Strymon; having done so he threw himself into the fire.” (tr. Macaulay 1890)

In (9), the underlined δέ is clearly additional: Herodotus recounts the rest of the story, i.e., what happened after he had thrown his wife, children, concubines and servants into the pyre he had built. There is no adversativity or contrast here; μετὰ ταῦτα also suggests that the utterance marked by δέ is the next step in the story and, hence, purely additional (note, in this respect, the subsequent δέ, which functions similarly).

Compare the previous example with (10):

(10) Οὐδαμῶς, ἔφη, ἐπεὶ πολλοὶ ἀνδρεῖοί εἰσιν, ἄδικοι δέ, καὶ δίκαιοι αὖ, σοφοὶ δὲ οὐ. (Plato, *Protagoras* 329e5-6; taken from Denniston 1954²: 165)

[Socrates has just asked Protagoras whether a person who is virtuous in one respect, is virtuous in all respects. Protagoras’ answer:] “By no means, he replied, since many are brave, unjust [*de*]; and many again are just, [*de*] not wise.” (tr. Lamb 1924)

¹⁶ In Ancient Greek particle research today, I know of no scholar who would classify οὖν as Dionysius did.

Here, δέ clearly points to a contrast. The first δέ connects a positive quality (ἀνδρεῖοι) with a negative one (ἄδικοι), as does the second one (δίκαιοι vs. σοφοὶ οὐ). Notice, in this respect, that *but* is a felicitous translation here, as opposed to (9), where it is infelicitous – *but* is usually regarded as the connective particle *par excellence* for indicating some type of contrast (cf. e.g. Fraser 1990: 138). (10), then, would be an example of ‘adversative’ δέ – it connects two opposing traits.

Denniston points out that “confirmatory and causal” γάρ “may be illustrated from any page of any Greek author” (1954²: 58). One example was already provided in (4); (11) is another one:

(11) {Οι.} ὦναξ Ἄπολλον, εἰ γὰρ ἐν τύχῃ γέ τω
 σωτῆρι βαίῃ λαμπρὸς ὥσπερ ὄμμα τι.
 {Ιε.} ἀλλ’ εἰκάσαι μὲν, ἡδύς οὐ γὰρ ἂν κάρα
 πολυστεφῆς ὧδ’ εἶρπε παγκάρπου δάφνης. (Sophocles, *Oedipus the King* 80-83)
 [A priest has indicated to Oedipus that Creon, Oedipus’ brother-in-law, is returning.]
 {Oedipus} “Lord Apollo, may he come to us in the brightness of saving fortune, even as his face is bright!”
 {Priest} He seems to bring comfort; not [*gar*] would he be coming crowned so thickly with berry-laden bay otherwise.” (tr. Jebb (1887), with alterations)

The priest gives his ‘ground for believing’ (as Denniston (1954²: 58) would put it) the proposition preceding γάρ. He thinks that Creon is bringing comfort because he is crowned with bay – if someone is crowned as such, he will usually bring happy news; conversely, people who do not bring happy news will not be crowned as such (or so the priest believes).

Examples of inferential οὖν are not hard to find either:

(12) τοὺς μὲν γὰρ λόγους περὶ τοῦ τιμωρήσασθαι Φίλιππον ὁρῶ γιγνομένους, τὰ δὲ πράγματ’ εἰς τοῦτο προήκοντα, ὥσθ’ ὅπως μὴ πεισόμεθ’ αὐτοὶ πρότερον κακῶς σκέψασθαι δέον. οὐδὲν οὖν ἄλλο μοι δοκοῦσιν οἱ τὰ τοιαῦτα λέγοντες ἢ τὴν ὑπόθεσιν, περὶ ἧς βουλευέσθε, οὐχὶ τὴν οὔσαν παριστάντες ὑμῖν ἀμαρτάνειν. (Demosthenes, *Olynthiac* III.1.3-2.1)

[The *Olynthiacs* are a collection of speeches by Demosthenes in which he argues that Athens should help the city of Olynthus fight off Phillip II of Macedon. This example comes at the beginning of his third speech:] “I observe that the speeches are all about punishing Philip, while our affairs have reached this stage, at which it must be our first concern to avoid disaster ourselves. Nothing [*oun*] else do these speakers seem to me to be doing than making the mistake of submitting to you the wrong subject for deliberation.” (tr. Vince (1930), with alterations)

If other orators are, as Demosthenes suggests, talking about subject A (punishing Philip) while they should be talking about subject B (avoiding disaster), then they are making the mistake of talking about the wrong ὑπόθεσιν. As such, this is a simple *modus ponens* inference: if proposition X is true, then proposition Y is true as well. Proposition Y is marked by οὖν.

For the connective particles we are considering here, the division in (8) can be considered theoretical ground zero – it has functioned as a baseline for subsequent research, most of which accepts Denniston’s basic correlation between category and connective particle in (8) (even if many scholars do not accept his more detailed accounts of different particles). On most views, even today, δέ adds something to the previous utterance, but can be used to indicate contrast as well; γάρ is considered causal in some sense; and οὖν can mark inferences. However, Stage III approaches are, as we shall see, radically different from the Stage II research (mainly represented by Denniston) in their underlying framework – they take a less semantic and more pragmatic approach. Whereas Denniston assumes that δέ, γάρ and οὖν connect ‘ideas’ (1954²: xxxix), Stage III approaches will take them to function as signals for coherence, a multidimensional and hence much more inclusive notion. Contemporary descriptions of δέ, γάρ and οὖν are, then, more fine-tuned, even if the precedent established by Denniston in (8) is still quite influential.

It will be useful to take stock of where we are in our conception of what a ‘connective particle’ is, and how the construal of its constitutive elements has shifted since we last left them in Stage I, when they were still regarded as σύνδεσμοι:¹⁷

(13) a. connective: connective particles are still, first and foremost, items which ‘bind together’ different parts of the text in various ways.

b. streamlining: grammatical subordinators have been excluded from the class of (connective) particles, which now consists only of (grammatical) coordinators.

c. difficult to translate: there is usually no one-to-one correspondence between a (connective) particle in Ancient Greek and a word in modern languages – the full spectrum of translational possibilities has to be employed, including punctuation.

d. syntactic detachability: connective particles are outside of the syntax of the clause/sentence proper.

e. establishing semantico-logical relations: Dionysius’ typology of particles has been updated – connective particles are still catalogued according to their different “methods of connexion [sic]” (Denniston 1954²: xlvii), but their functions are now

¹⁷ See Drummen (2015: 17) for an overview of other Stage II particle analyses – Hartung (1828) and Bäumlein (1861) certainly need to be mentioned here.

reanalyzed in logical and semantic terms. For example, a relation of addition would mean that the proposition is true iff the two parts connected by $\delta\acute{\epsilon}$ are true; a relation of cause would entail that the proposition is true iff the two parts connected by $\gamma\acute{\alpha}\rho$ are true and iff the proposition marked by $\gamma\acute{\alpha}\rho$ is causally responsible for the truth of the proposition preceding $\gamma\acute{\alpha}\rho$. In this sense, these relations correspond to logical connectives: & (that is, logical conjunction) for Addition, \rightarrow (that is, implication) for the confirmatory/causal relation (or for the inferential relation, which is the conclusion of \rightarrow). Put differently, we are dealing with logical relations here, i.e., relations which are truth-functional (cf. Kroon 1995: 10). Adversativity, on the other hand, which does not have an analogous logical connective, is a semantic relation – it is a relation between propositions which is semantically established, and cannot be described in logical or grammatical terms (cf. Mann & Thompson 1986a; Blass 1993: 92).¹⁸

In sum, a connective particle is a coordinating, syntactically separate word which establishes some sort of semantic or logical connection between different propositions (or, to use Denniston’s own words, different ‘ideas’), and which is hard to translate. Again, not all particles are subject to the criteria in (13) – $\alpha\upsilon$, for instance, is not connective; neither is it syntactically detachable; nor does it establish a semantico-logical relation (cf. Zakowski 2014c). The three particles under consideration in this dissertation, however, check all the boxes in (13), and are, as such, part of the connective subset of particles.

1.1.3 Stage III: coherence and discourse markers

From the mid-1980s onwards, a distinctive shift took place in Ancient Greek particle research. Earlier approaches had been theoretically rudderless – Denniston did not analyze particles from a specific linguistic framework, and his observations were mostly intuitive and descriptive instead of theoretically founded.¹⁹ With the advent of papers and books such as Levinsohn (1987), Klein (1992), Bakker (1993) and especially Rijksbaron (1997a), a ‘discourse turn’ occurred – particles now started to be investigated under a coherence framework. At its most basic level, this means that particles were

¹⁸ In this sense, De Jong’s remark (1997: 175-176) that “[i]t is typical of | Denniston that he interprets particles largely at the level of the sentence rather than of the text” seems to be wrong – Denniston’s relations are clearly between ‘ideas’, as he himself puts it, and hence not (purely) grammatical.

¹⁹ As we will see in the chapters on the particular semantics of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\upsilon$, there are other analyses of these particles which are in line with Denniston’s approach. These suffer from the same drawback outlined here, as will become obvious.

now analyzed as contributing not (only) to logical or semantic relations, but as helping establish the coherence of the discourse. The most important and enduring aspect of this new approach is that texts are today no longer regarded as a collection of sentences or ‘ideas’, but that they are divided into discourse segments which are linked to each other via coherence. These discourse segments will often overlap with the clause (i.e., one discourse segment equals one clause), but they need not be co-extensive – a discourse segment may be a phrase (or even a word), or a combination of several clauses.²⁰

There are two related strands of research in Stage III analyses of particles. One of these deals with coherence; the other is concerned with the notion of discourse markers. In the following paragraphs, I will discuss these two strands separately. They are connected in the sense that discourse markers are usually taken to establish coherence in some way; as such, I will begin with the notion of coherence.

1.1.3.1 What is coherence?

Coherence is best thought of as the underlying semantic structure behind the collection of sentences which make up a text, and which unifies those sentences into one related whole. As Halliday & Hasan (1976: 2), who co-authored one of the groundbreaking treatises on discourse coherence, put it, “[a] text does not consist of sentences; it is realized by, or encoded in, sentences”. Halliday & Hasan focus on the distinct “lexicogrammatical resources” (1976: 303) which can be utilized to tie a text together (i.e., create coherence).²¹ These resources are known as ‘cohesive devices’, and they include e.g. anaphora and ellipsis – the former refers back to a referent which has already been established, and hence points to semantic continuity; with the latter, an element in the utterance has to be supplied through recourse to a previous utterance. Coherence and cohesion are not one and the same: a text can be coherent even without cohesive devices. Moreover, a text can be tied together into coherent discourse through various cohesive means, but the connections and relations established through these

²⁰ The notion of a ‘discourse segment’ has been conceptualized in many different ways. The most inclusive definition can be found in Functional Discourse Grammar, where a ‘Discourse Act’ (i.e., a discourse segment) is a single ‘intonation group’ (cf. also Cruttenden (1986) and Chafe (1994); Janse (1993) and Soltic (2015) for Ancient Greek), with one ‘focus’ (i.e., pragmatically emphasized constituent), and a single illocution (Hengeveld & Mackenzie (2008); see also Kroon (1995)). As such, it is a distinct prosodic, informational and illocutionary segment. Note that it is not (necessarily) delineated grammatically. See Hannay & Kroon (2005) for more discussion on discourse segments from a Functional Discourse Grammar perspective.

²¹ Coherence has been conceptualized in two distinct ways – it applies to either the underlying connections between the content of the text or to the underlying connections between the content in the hearer’s representation of the text, which the hearer necessarily derives in order to understand the text. Coherence, then, is either a textual or cognitive notion (see Blass 1990: 16-20; Blakemore 2004: 232-235).

means are semantic in nature – a coherent text is a collection of “elements that are structurally unrelated to one another” and which “are linked together, through the dependence of one on the other for its interpretation” (id.: 27; see also Blass 1990: 16-20; Blakemore 2004: 232-235; Bakker & Wakker 2009: xii-xiii). Coherence theorists believe that what makes texts into texts and not just “arbitrary collections of utterances” is their underlying coherence (Kehler 2004: 241).

Besides anaphor and ellipsis, one of the most widely researched cohesive devices is what Halliday & Hasan call ‘conjunction’. They distinguish four types of conjunctive relations, each of which is related to one or more connective particles in English:

(14) a. Additive: subdivided among the ‘and’ and the ‘or’ type, which are both basic forms of coordination (1976: 244-245).

b. Adversative: the “basic meaning” of this relation is “contrary to expectation”; this relation can be made explicit through the use of, among other conjunctions, *but*, *however* and *though* (id.: 250).

c. Causal: includes both those relations where a reason or a purpose is expressed and those where a result is expressed. Representative conjunctive particles are *so*, *thus* and *therefore*, as well as *for* and *because* (id.: 256-258).

d. Temporal: indicates a “sequence in time”, and is often expressed by the use of *then*; also by *previously* and *finally*, for example (id.: 261-263).

Connective particles such as *but* and *so* can hence be connected to the notion of coherence as examples of cohesive devices. The same is true for *δέ*, *γάρ* and *οὐν* – as we will see, they have often been regarded as markers of discourse coherence.

There are three important aspects to coherence. The first is that coherence obtains at different ‘planes’ of discourse. The second is that discourse is coherent in a hierarchical sense – discourse segments are organized hierarchically in light of their communicative importance. The third is that discourse segments are linked via coherence relations – these are relations which organize the discourse in a functional sense. I will discuss these three aspects in terms of their relevance to connective particles.

Planes of discourse

Based on the conjunctive relations in (14), there does not seem to be any great difference between the coherence approach and the approach espoused by Denniston – his categorization of connective particles into four classes, discussed in (8) above, looks very similar. Except for the systematic fashion in which ‘coherence’ is described as a fundamental characteristic of every text, the observation that there are conjunctive relations and that these can be marked by conjunctions (or connective particles) is nothing new. In fact, the only difference with (8) seems to be that (14) takes the ‘Confirmatory’ and ‘Inferential’ relations together under (14c), and that it adds the

‘Temporal’ relation. However, one of Halliday & Hasan’s main contribution here lies, as Kroon argues (1995: 12), in distinguishing between two ‘planes’ (Halliday & Hasan’s term) on which conjunctive relations can be located (1976: 239-240). They can function at either the external or the internal plane (id.: 241):

“When we use conjunction as a means of creating text, we may exploit either the relations that are inherent in the phenomena that language is used to talk about, or those that are inherent in the communication process.”

The first use quoted here is ‘external’, the second one is ‘internal’. The temporal relation, for instance, can be used externally:

(15) a. I left the house and then I got in the car.

Here, the two actions described occur one after the other, as indicated by ‘then’; however, it can also be used internally:

(15) b. First, he was unable to stand upright. Next, he was incapable of inserting the key into the lock. (from Halliday & Hasan 1976: 239)

The context here is, for example, that you are enumerating the reasons why you think someone was drunk. In (15b), there is no temporal sequence in the ‘real world’, but “[t]he two sentences are related as steps in an argument, and the meaning is rather ‘first one move in the speech game is enacted, then another’” (id.: 240). Put differently, there is a sequence in the structure of the discourse, where there are two steps which follow each other as part of the case you want to make. The different cohesive devices (‘(and) then’ in (15a), ‘first’ and ‘next’ (15b)) are used externally (15a) and internally (15b), respectively, as well.

The same distinction can be made with, for instance, *because*:

(16) a. Mary ate the apple because she was hungry.

b. Mary ate the apple, because there’s an apple core in her backpack.

In (16a), the proposition in the *because* clause provides the ‘real-world’ reason which explains why Mary ate the apple (also called ‘content causality’). In (16b), by contrast, the *because* clause provides evidence for the claim in the main clause – on the basis of the *because* clause, the speaker derives the conclusion that Mary ate the apple. Whereas

(16a) can be rephrased as ‘the reason why she ate the apple, is that she was hungry’, (16b) should be ‘the reason why I say she ate the apple, is that there’s an apple core in her backpack’ (also called ‘epistemic causality’).²² (16c) is ‘internal’ in a different sense:

(16) c. Did Mary eat the apple? Because I saw you were having lunch with her today.

In (16c), the *because* clause explains why the speaker uttered the speech act in the main clause – that is, it can be rephrased as ‘the reason why I ask this, is that I saw you were having lunch with Mary today’ (also called ‘speech-act causality’). The *because* clause provides the basis on which the speaker asks the question in the main clause (the speaker thinks his interlocutor may know the answer to his question because he was there when she was eating food). As such, it explains why a speaker uttered a discourse segment, and is hence more discourse-oriented than (16b) – while the *because* clause there enabled the speaker to draw a certain conclusion, the *because* clause in (16c) enables the speaker to utter a discourse segment (Sweetser 1990: 77).²³ Note that *because* is truth-conditional in (16a), but not in (16b) or (16c):

(16’) a. A: Mary ate the apple because she was hungry.

B: That’s not true. Mary ate the apple and she was hungry, but she didn’t eat the apple because she was hungry but because she wanted to show everyone that she eats the entire apple, including the core.

b. A: Mary ate the apple, because there’s an apple core in her backpack

B: #That’s not true. Mary ate the apple and there’s an apple core in her backpack, but she didn’t eat the apple because there’s an apple core in her backpack, but because she’s not hungry right now.

c. A: Did Mary eat the apple? Because I saw you were having lunch with her today.

²² Compare with Sanders et al.’s (1993: 99-100; also Knott & Sanders 1998: 171) distinction between semantic and pragmatic relations.

²³ See also Sweetser (1990: 78), who argues that “if an utterance is imperative or interrogative in form, then it cannot reasonably be causally conjoined to another utterance except at the speech-act level.”

There are traces in Stage II particle research that point to some rudimentary understanding of a distinction such as the one in (16a) and (16b), and even the speech-act use in (16c) – see Denniston (1954²: 60), who states that “γάρ gives the motive for saying that which has just been said: ‘I say this because...’” (see example (11) *supra*, where γάρ introduces the ‘ground for believing’ something, as Denniston would put it). See also Misener (1904: 18) on ‘motivating γάρ’, which “does not give the reason for, nor, explain the thought contained in a previous statement, question, or command, but justifies the utterance of these sentences”. However, these remarks are not placed in a larger context such as the one proposed by Halliday & Hasan, and are applied only to γάρ.

B: #That's not true. Mary did not eat the apple because you saw me having lunch with her today.

Because, then, can function on three distinct planes: the content level, the epistemic level, and the speech-act level (Sweetser 1990: 76-112, esp. 76-81).

The distinction between different 'planes' of meaning is one of the most enduring aspects of research on coherence, and has had significant influence on particle research cross-linguistically. Schiffrin's (1987: 25-28) 'model of discourse' distinguishes between five levels, and identifies a host of cohesive devices in English which "reflect underlying connections between propositions" (id.: 61), and which can function at any of the five levels. Some particles, on her model, function at the level of the organization of the discourse (such as 'first' and 'next' in (15b) *supra*; these are connective); others mark different 'turns' in the discourse (such as greetings or cases where the speaker relinquishes the floor to his interlocutor) – these work at a different level. Yet another level is concerned with the participants – speakers can present themselves as being committed or distanced from what they are saying, for example, and can use particles to mark this stance (see also Du Bois 2007). Redeker (1991: 1167-1168; see also Redeker 2000) compresses Schiffrin's five planes into three, but retains the idea of cohesive devices operating on distinct planes of discourse.²⁴

Kroon's model (1995: 59-61) has three levels, which are again related to the function of (Latin) particles:²⁵

(17) a. Representational level: corresponds to Halliday & Hasan's (1976) 'external plane' – this level has to do with the ideas behind the linguistic expressions referring to them. 'Because' in (17a) would function on this plane.

b. Presentational level: has to do with the "presentation and organization of the information" – word order should be discussed in terms of this level, as should notions such as topic and focus. Most importantly for our purposes, this level has to do with the ways in which a speaker indicates that "the information of one stretch of discourse is functionally related to another stretch of discourse" (1995: 61). 'Because' in (16b) would function on this plane – it organizes the discourse by indicating how the upcoming segment is related to the previous one (in this case, as evidence for the previous claim (see Kroon 1995: 74; 1998: 212)).

²⁴ See Maeschler (1994) for another multiplane approach to discourse; also Sinclair (1981) for an early distinction between two planes of discourse ('autonomous' and 'interactive').

²⁵ Kroon (1998: 207) explicitly states that her approach is inspired by Schiffrin (1987).

c. Interactional level: has to do with “language in its function of establishing and maintaining interactional relationships between interlocutors” (1995: 59). Aspects of the discourse which concern speaker attitude, the speaker-hearer relationship, social status, and so on, should be described in terms of the interactional level of discourse.

This model of discourse, along with many other similar models, postulates a tight link between particles and different levels of discourse, for each of which particles can help establish coherence.²⁶ This is particularly useful, Kroon argues, for particles which are usually translated identically. In Latin, for instance, *autem* (usually translated as ‘but’ or ‘and’) would indicate presentational discontinuity (the discourse segment which it marks is “discrete” *vis-à-vis* the “preceding verbal or non-verbal context” (Kroon 1995: 250)), while *at* (usually translated as ‘but’) is more inclined to introduce a challenging reactive move at the interactional level (id.: 363). While *at* can also be used presentationally (i.e., as a synonym of *autem*), this use is “secondary” (1995: 364). Similarly, *nam* (usually translated as ‘for’ or ‘because’) points to presentational subsidiarity (the discourse segment it marks it communicatively less important than the preceding one (1995: 168)), while *enim* (also usually translated as ‘for’, or ‘after all’) is a ‘consensus particle’ which “indicates an appeal to the involvement and cooperation of the addressee”, and is hence interactional (1995: 171). While *autem* and *at* on the one hand and *nam* and *enim* on the other are usually translated the same, then, they are not interchangeable – according to Kroon, they function at different discourse levels, and their function should be described as such.²⁷

The hierarchical organization of discourse

A second important contribution of coherence approaches to the study of connective particles is the notion of hierarchical organization. A coherent text is not just a chain of equally important discourse segments – some are communicatively more important than others. A given text, then, can be structured hierarchically: central discourse segments are ‘on top’, and can give rise to lower-order (i.e., less important) discourse segments which are communicatively dependent on these central segments. Kroon (2011: 189-90) provides an example from Latin (I only give her English translation and indicate where the particles are located):

²⁶ See also Brinton (1996), who assumes that particles can function at a ‘textual’ or an ‘interpersonal’ level – cf. Brinton (2008: 17-18) for a short overview.

²⁷ See also Maeschler & Schiffrin (2015: 192) on Schiffrin (1987).

(18) 1. But during these events [i.e. the attack on the fortress] the quaestor L. Sulla arrived in camp with a large force of cavalry, which he had mustered from Latium and the allies, having been left in Rome for that purpose.

2. But since the event has brought that great man to our attention, it seems fitting to say a few words about his life and character;

3. for we shall not speak elsewhere of Sulla's affairs, and Lucius Sisenna, whose account of him is altogether the best and most careful, has not, in my opinion, spoken with sufficient frankness.

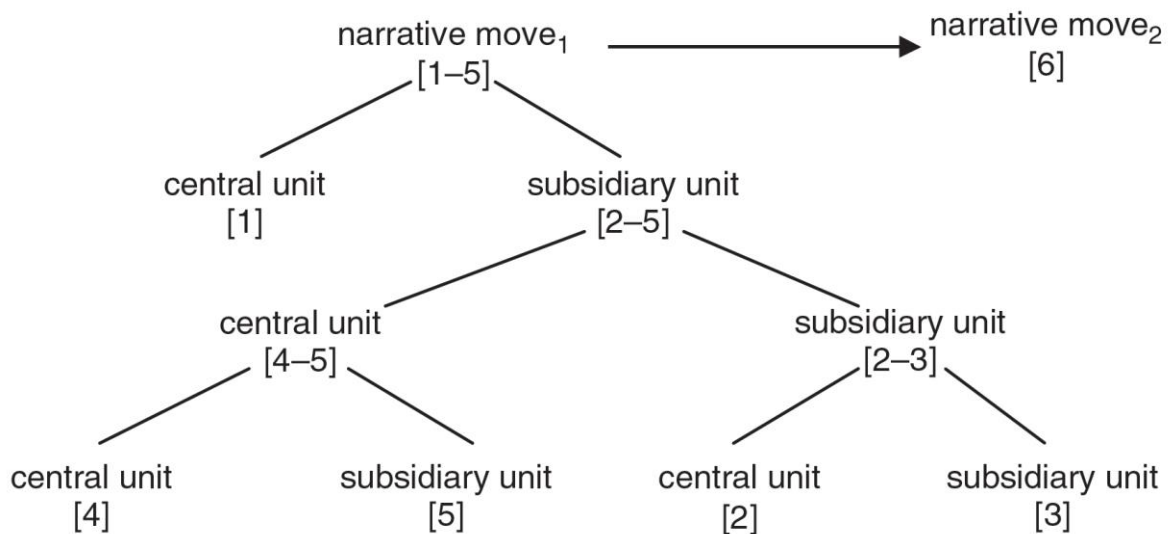
4. [*Igitur*] Sulla, then, was a noble of patrician descent, of a family almost reduced to obscurity through the degeneracy of his ancestors. He was well versed in Greek and Roman letters ... And, before his victory in the civil war the most fortunate of all men, his fortune was never greater than his deserts, and many have hesitated to say whether his bravery or his good luck was greater.

5. [*Nam*] as to what he did later, I know not if one should speak of it rather with shame or with sorrow.

6. [*Igitur*] Sulla, as I have already said, after he came with his cavalry to Africa and the camp of Marius, soon became ... (Sallust, *The Jugurthine War* 95-96.1)

This fragment is divided into six discourse segments ('units' in the figure which follows). The further indented these are, the less important they are from a communicative point of view. This leads to the following hierarchical structure (see also Kroon 2009: 148-149):

Figure 1.1 Hierarchical structure of (18) (from Kroon 2011: 190)



Different units can be grouped together in larger groups (a ‘move’, here), but the most important part of the figure for our purposes is the distinction between ‘central’ and ‘subsidiary’ units, which is recursive – a central unit (let’s call it ‘central unit A’) is central *vis-à-vis* a subsidiary unit (let’s call it ‘subsidiary unit A’). This subsidiary unit here consists of several smaller units which can, for instance, comprise another central unit (‘central unit B’) and another subsidiary unit (‘subsidiary unit B’). Central unit B is located on a lower level than central unit A, while subsidiary unit A is located on a higher level than subsidiary unit B. In Figure 1.1, subsidiary unit 5 is communicatively less important than the subsidiary unit comprising units 2-5, while central unit 1 is communicatively more important than central unit 4.

Particles (especially connective particles, i.e., those concerned with the organization of discourse or, in Kroon’s (1995) terms, the presentational level of discourse – see (17)) can indicate whether a given discourse segment is communicatively as important, more important, or less important than the surrounding (usually preceding) discourse segments. In this case, *nam* in unit 5 points to a subsidiary discourse segment, while *igitur* in units 4 and 6 marks a return to a discourse segment which is higher up (i.e., more central to the narrative; see Kroon 2011: 190). Similar functions have been proposed for γάρ and οὖν respectively (see e.g. Wakker 2009: 67; Slings 1997: 101; Bakker 2009: 41; Sicking 1993: 20, 27; van Ophuijsen 1993: 91; Bakker 1993: 308; Thijs 2012: 18; Allan 2009: 191; De Jong 1997: 184):

(19)

1. μάλιστα δὲ αὐτῶν ἐν ἐθαύμασα τῶν πολλῶν ὧν ἐψεύσαντο, τοῦτο ἐν ᾧ ἔλεγον ὡς χρεὴν ὑμᾶς εὐλαβεῖσθαι μὴ ὑπ’ ἐμοῦ ἐξαπατηθῆτε ὡς δεινοῦ ὄντος λέγειν.

2. τὸ γὰρ μὴ αἰσχυνθῆναι ὅτι αὐτίκα ὑπ’ ἐμοῦ ἐξελεγχθήσονται ἔργῳ, ἐπειδὴν μηδ’ ὅπωςτιοῦν φαίνωμαι δεινὸς λέγειν, τοῦτό μοι ἔδοξεν αὐτῶν ἀναισχυντότατον εἶναι, εἰ μὴ ἄρα δεινὸν καλοῦσιν οὗτοι λέγειν τὸν τάληθῆ λέγοντα·

3. εἰ μὲν γὰρ τοῦτο λέγουσιν, ὁμολογοίην ἂν ἔγωγε οὐ κατὰ τούτους εἶναι ῥήτωρ.

4. οὗτοι μὲν οὖν, ὥσπερ ἐγὼ λέγω, ἢ τι ἢ οὐδὲν ἀληθὲς εἰρήκασιν, ὑμεῖς δέ μου ἀκούσεσθε πᾶσαν τὴν ἀλήθειαν (Plato, *Apology* 17a1-17b8)

[Socrates begins his defense, and immediately accuses the plaintiffs of lying:]

1. “But I was most amazed by one of the many lies that they told—when they said that you must be on your guard not to be deceived by me, because I was a clever speaker.

2. [*Gar*] I thought it the most shameless part of their conduct that they are not ashamed because they will immediately be convicted by me of falsehood by the evidence of fact, when I show myself to be not in the least a clever speaker, unless indeed they call him a clever speaker who speaks the truth;

3. if [*gar*] this is what they mean, I would agree that I am an orator—not after their fashion.

4. They [oun], as I say, have said little or nothing true; but you shall hear from me nothing but the truth.” (tr. Fowler 1914)

A coherence analysis of (19) would go something like this. The first γάρ would introduce a discourse segment in which Socrates delves deeper into his accusers’ assumption that he is δεινὸς λέγειν (a ‘clever speaker’). The second γάρ marks unit 3 as being subsidiary to unit 2, which was introduced by the first γάρ – it goes into more detail about a part of the previous segment, namely the possibility that his accusers equate a ‘clever speaker’ with ‘a speaker who speaks the truth’. On the other hand, οὖν in unit 4 marks a transition to the highest discourse level (i.e., on a par with unit 1), where Socrates recaps his point that his accusers “have said little or nothing true” and adds that he himself will speak the whole (πᾶσαν) truth.

(20)

1. ἐν δὲ τῇ παρακομιδῇ τῇ ἐς τὴν Σικελίαν καὶ πάλιν ἀναχωρήσει καὶ ἐν τῇ Ἰταλίᾳ τισὶ πόλεσιν ἐχρημάτισε περὶ φιλίας τοῖς Ἀθηναίοις,

2. καὶ Λοκρῶν ἐντυχάνει τοῖς ἐκ Μεσσήνης ἐποίκοις ἐκπεπτωκόσιν,

3. οἱ μετὰ τὴν τῶν Σικελιωτῶν ὁμολογίαν στασιασάντων Μεσσηνίων καὶ ἐπαγαγομένων τῶν ἐτέρων Λοκροῦς ἔποικοι ἐξεπέμφθησαν, καὶ ἐγένετο Μεσσήνη Λοκρῶν τινὰ χρόνον.

4. τούτοις οὖν ὁ Φαίαξ ἐντυχὼν τοῖς κοινομένοις οὐκ ἠδίκησεν·

5. ἐγεγένητο γὰρ τοῖς Λοκροῖς πρὸς αὐτὸν ὁμολογία συμβάσεως περὶ πρὸς τοὺς Ἀθηναίους.

6. μόνοι γὰρ τῶν συμμαχῶν, ὅτε Σικελιῶται συνηλλάσσοντο, οὐκ ἐσπείσαντο Ἀθηναίοις, οὐδ’ ἂν τότε, εἰ μὴ αὐτοὺς κατεῖχεν ὁ πρὸς Ἰππωνιᾶς καὶ Μεδμαίους πόλεμος ὁμόρους τε ὄντας καὶ ἀποίκους.

7. καὶ ὁ μὲν Φαίαξ ἐς τὰς Ἀθήνας χρόνῳ ὕστερον ἀφίκετο. (Thucydides, *History of the Peloponnesian War* V.5.1.1-V.5.3.5)

[The Athenian statesman Phaeax has been travelling through Sicily, trying to gain support for a war against the Syracusans:]

1. On his voyage, both to and from Sicily, he made proposals of friendship to several of the Italian cities.

2. He also fell in with some Locrian settlers who had been driven out of Messene.

3. After the agreement between the Sicilian towns, a feud had broken out at Messene, and one of the two parties called in the Locrians, who sent some of their citizens to settle there; thus Messene was held for a time by the Locrians.

4. They [oun] were returning home after their expulsion when Phaeax fell in with them, but he did them no harm;

5. [gar] the Locrians had already agreed with him to enter into a treaty with the Athenians.

6. They alone [*gar*] of the allies, at the general reconciliation of the Sicilians, had not made peace with Athens. And they would have continued to hold out had they not been constrained by a war with the Itoneans and Melaeans, who were their neighbours and colonists from their city.

7. Phaeax then returned to Athens. (tr. Jowett 1900)²⁸

As in the preceding example, οὐ̃ν, in unit 4, marks a return to a higher level after a digression about how the Locrians (i.e., Greeks) came to be in Sicily (see Slings 1997: 101-102; Bakker 2009: 41). The first γάρ (in unit 5) explains why Phaeax did them no harm, and is located at a lower discourse level, while the second γάρ (in unit 6) explains how the Locrians had already entered into a treaty with the Athenians.

Δέ, by contrast, is often analyzed as ‘marking off’ different discourse segments from each other at the same level of the discourse hierarchy (Martín López 1993: 230; Bakker 1993). This explains why it is one of the most commonly used particles (George 2009: 157; Martín López 1993: 223) – its function is ‘neutral’ in that it does not mark subsidiarity or centrality, but ‘just’ marks a transition to a new discourse segment at the same discourse level (see also Klein 1992: 33). Kroon (1995: 218) points out that, traditionally, δέ’s meaning has been taken to be very close to that of Latin *autem*; in fact, George (2009: 167) argues that Bakker’s (1993) seminal treatment of δέ is very close to Kroon’s analysis of *autem* (see also Bakker 1993: 305). As outlined above, Kroon (1995: 250) assumes that *autem* marks its discourse segment as being a “discrete” unit “in relation to its preceding verbal or non-verbal context” – which is indeed quite close to how both Bakker and Stephanie Black (2002) analyze δέ. Bakker (1993: 293) sees δέ as “a boundary-marking element” in Homer, i.e., an element which marks the boundary between two different discourse segments; Black’s analysis (2002: 153) of δέ in the Gospel of Matthew ends with the conclusion that it is “a signal of low- to mid-level discontinuity”, for example in cases where the narrator makes a “temporal shift” (id.: 166) or a shift in perspective to a different discourse participant (id.: 177). As such, Black’s approach is very close to that of both Kroon and Bakker, although her framework is less coherence-oriented than that of others cited in this paragraph.²⁹

Let’s take an example:

²⁸ Note that larger segments, like unit 6 above, could be split further into subsidiary and central segments within that unit; however, for our purposes here, which is to demonstrate how γάρ and οὐ̃ν seem to indicate transitions to a lower or higher level of the discourse hierarchy, the above structure is detailed enough.

²⁹ This point will be taken up again (and in more detail) when I discuss the existing body of research on δέ, γάρ and οὐ̃ν in their separate chapters.

(21) Ὡς ἔφατ' εὐχόμενος, τοῦ δ' ἔκλυε Φοῖβος Ἀπόλλων,
 βῆ δὲ κατ' Οὐλύμποιο καρήνων χωόμενος κῆρ,
 τόξ' ὥμοισιν ἔχων ἀμφοτερέα τε φαρέτρην·
 ἔκλαγξαν δ' ἄρ' οἴστοι ἐπ' ὤμων χωόμενοι,
 αὐτοῦ κινηθέντος· ὃ δ' ἦϊε νυκτὶ ἑοικώς.
 ἔζετ' ἔπειτ' ἀπάνευθε νεῶν, μετὰ δ' ἰὸν ἔηκε·
 δεινὴ δὲ κλαγγὴ γένετ' ἀργυρέοιο βιοῖο. (Homer, *Iliad* 1.43-49)

[The priest Chryses is asking Apollo for retribution against the Greeks for taking his daughter.]

“So he spoke in prayer, [δε] Phoebus Apollo heard him.
 He came [δε] down from the peaks of Olympus, angered at heart,
 bearing on his shoulders his bow and covered quiver.
 [δε] The arrows rattled on the shoulders of the angry god
 as he moved, he [δε] came like the night.
 Then he sat down apart from the ships, [δε] he let fly an arrow.
 Terrible [δε] was the twang of the silver bow.” (tr. Murray 1924)

The first δέ indicates a transition from Chryses speaking his prayer (not quoted here) to Apollo hearing Chryses' prayer; the second δέ is the next step in Apollo's reaction – his decision to stride down from Olympus with his bow. With the third δέ, there seems to be a 'low-level discontinuity', in Black's terms, in that the narrator is dealing with the same scene, but has 'zoomed in' on a specific aspect of Apollo's striding – namely, the rattling of the arrows. With the fourth δέ, there is again no sharp discontinuity: the previous context remains important, as we get a simile ('his coming was like the night'). The fifth δέ again marks a transition: having sat down, Apollo now releases an arrow. The last δέ focuses on one of the consequences of Apollo's letting fly the arrow.

This is a very basic description of what δέ does in (21) – however, it demonstrates (a) that δέ occurs quite often, at least in this fragment of Homer, and (b) that δέ often occurs where no subsidiarity or 'return to a higher discourse level' occurs. Instead, δέ indeed seems to be able to mark a 'neutral' transition between discourse segments (especially so in the case of the first, second and last δέ). However, examples like the fourth δέ (introducing the simile) indicate that matters might not be so straightforward – a simile could be considered to be subsidiary to the segment which induces it. The last segment, which is marked by δέ, also seems to be less important than the preceding one, which is also marked by δέ – the fact that Apollo is firing an arrow (μετὰ δ' ἰὸν ἔηκε) is more relevant to the narrative than the sound his 'silver bow' is making (δεινὴ δὲ κλαγγὴ γένετ' ἀργυρέοιο βιοῖο). In the same vein, the fact that Apollo listened to Chryses' prayer (τοῦ δ' ἔκλυε Φοῖβος Ἀπόλλων) seems to be more relevant than the fact that Chryses asked him for something in prayer (ὥς ἔφατ' εὐχόμενος) – we were already aware of the latter, as the narrator has just presented Chryses' prayer in direct speech.

Yet the former, more relevant segment is marked by $\delta\acute{\epsilon}$, not $\omicron\tilde{\nu}$. Seeing that $\delta\acute{\epsilon}$ seems to be able to mark both more relevant and subsidiary discourse segments, it would seem as if its contribution to the discourse lies in a different direction than the central/subsidiary dichotomy proposed for $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\nu}$ – but it does not lie in the direction of a simple, neutral transition either. More needs to be said here, of course, and I will do so in my discussion of the particular semantics of $\delta\acute{\epsilon}$.

Coherence relations

The previous discussion centered on coherence theorists' assumption that discourse segments can be either central or subsidiary. This resulted in a hierarchical discourse structure which is recursive: larger (central or subsidiary) discourse segments can be split into smaller (central and/or subsidiary) discourse segments, which can again be split into central and/or subsidiary segments – and so on, all the way down to the smallest central and subsidiary segment. Segments are related to each other via their 'rhetorical function' (in Functional Discourse Grammar; e.g. Hengeveld & Mackenzie 2008: 53), 'rhetorical relation' (in Rhetorical Structure Theory; e.g. Mann & Thompson 1986a), or 'coherence relation' (Hobbs 1979; Sanders et al. 1992; Sanders & Noordman 2000: 38). These include relations such as Motivation, Concession, Correction, Elaboration, Background, and so on. Hengeveld & Mackenzie (2008) assume that only subsidiary segments are characterized by these coherence relations (the term I choose to adopt here to refer to these relations), but others, such as Mann et al. (1989) and Sanders et al. (1993), assume that central discourse segments can be marked as such too. However, most of the coherence relations (even on the latter view) apply to subsidiary segments – 'central' coherence relations include List (or Sequence) and Contrast (or Opposition), where the linked segments are, then, not hierarchically organized *vis-à-vis* each other (see e.g. Sanders et al. 1992, 1993).

Theorists who propose sets of coherence relations assume that the speaker has at her disposal a "menu" of coherence relations of which she chooses one to relate two discourse segments (Blakemore 1988: 233). An example:

(22) a. A well-groomed car reflects its owner

The car you drive says a lot about you. (from Mann et al. 1989: 56)

The underlined discourse segment, according to Mann et al. (*ibid.*), is a Restatement of the previous, central discourse segment. This coherence relation would have to be inferentially derived by the hearer in order to understand (22a). It should be noted here that the speaker can help the hearer derive this coherence relation by adding expressions which point to a Restatement. For example:

- (22) b. A well-groomed car reflects its owner
That is, the car you drive says a lot about you.

That is can mark an utterance as being a reformulation (see e.g. Blakemore 1996), and hence would make the coherence relation between the central and the subsidiary segment more perspicuous.

Another example is (23):

- (23) A division of labor seems to have taken hold.

While a well-financed “super PAC” supporting Mr. Bush assails Mr. Rubio on television and in the mail (it will release a new batch of ads on Thursday), Mr. Christie has stepped up the critiques on the campaign trail. (from *New York Times*, ‘Chris Christie and Jeb Bush Team Up on a Mutual Target: Marco Rubio,’ by Michael Barbaro and Jonathan Martin. 4th of February, 2016.³⁰)

In this news article, the authors are reporting that two Republican presidential candidates (Jeb Bush and Chris Christie) are joining forces against another Republican candidate, Marco Rubio. In the underlined segment, they give insight into how this partnership works. This (subsidiary) segment could be considered an Elaboration of the preceding (central) segment – it “presents additional detail about the situation [...] which is presented” in the central segment (Mann & Thompson 1986a: 273). The authors ‘fill in’ how Bush and Christie have divided the labor of attacking Rubio between themselves in the underlined segment. However, it could also be a Background, i.e., a segment without which the reader, in this case, will have difficulty in understanding the central segment (ibid.) – the reader will not understand the ‘division of labor’ proposed in the central segment without the addition of the subsidiary segment. This is one of the weaknesses of the hierarchical model of discourse – analysts in this framework rely overly on intuitions which may differ from parser to parser, and there are many contexts in which more than one coherence relation seems to be a possible reading (see also Redeker 2000: 245).³¹

According to Redeker (2000: 237), the “most explicit and most widely used system of coherence relations” in the sense outlined *supra* is the one already referred to above: Mann & Thompson’s Rhetorical Structure Theory (RST; Mann & Thompson 1986a; Mann

³⁰ Accessed via <http://www.nytimes.com/2016/02/05/us/politics/chris-christie-and-jeb-bush-team-up-against-boy-in-the-bubble-marco-rubio.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=first-column-region®ion=top-news&WT.nav=top-news>, on the 4th of February, 2016.

³¹ These are problems which Mann et al., to their credit, acknowledge (1989: 18-19); see also Redeker (2000: 237) and §2.1.1 *infra*.

et al. 1989; Taboada & Mann 2006). It is considered “[o]ne of the best-founded proposals” for a hierarchical model of discourse (Kroon 1995: 20), and can be summarized as follows (Taboada & Mann 2006: 425):

“RST addresses text organization by means of relations that hold between parts of a text. It explains coherence by postulating a hierarchical, connected structure of texts, in which every part of a text has a role, a function to play, with respect to other parts in the text.”

This ‘function’ can be described in terms of the coherence relations which were exemplified in (22) and (23) above. Taboada & Mann add that “[t]he notion of text coherence through text relations is widely accepted” (ibid.), and there is indeed a large number of theoretical frameworks which assume not only that discourse coherence is predicated on the existence of relations between different parts of texts, but also that these relations have to be recognized in order to attain an understanding of the text (Rouchota 1998: 13). RST originally proposed 24 different relations which could hold between discourse segments (e.g. Restatement or Elaboration, as evidenced above, but also Purpose, Concession, Contrast, and so on), but the list was eventually expanded to 30, adding, for example, List, Preparation and Unless (Taboada & Mann 2006: 426). Other models assume both other and more or less relations to exist – there are frameworks which posit only two relations (e.g. Grosz & Sidner 1986), while others have over seventy (e.g. Maier & Hovy 1993), while others still propose a number of relations in between those two extremes (cf. Blakemore 2004: 234). There is no agreement on the number of existing discourse relations, let alone what these agreed-upon discourse relations would be (Hovy & Maier 1995; Blakemore 2004: 234; see also §2.1.2 *infra*).

1.1.3.2 The shift from ‘particles’ to ‘discourse markers’

Despite these problems (and others, to be discussed in §2.1), the idea that discourse is hierarchical and that coherence relations exist has been implemented in many different models (e.g. Polanyi & Scha 1983; Polanyi 1988; Hobbs 1985; Hovy 1990; Sinclair & Coulthard 1992; Lascarides & Asher 1993; Filliettaz & Roulet 2002; Hengeveld & Mackenzie 2008) and has dominated Stage III research on Ancient Greek particles. Kroon’s account, in particular, has been very influential. Wakker (1997: 210) predicted that “Kroon (1995) will be *the* reference point for other particle studies in Latin as well as Greek”, and there is indeed a large number of papers on particles today which are more or less beholden to her approach (see; Rijksbaron 1997a: 3, 1997c: 191; Wakker 1997; Redondo Moyano 2004; Bonifazi 2008, 2012; Revuelta Puigdollers 2009; George 2009; Orriens 2009; Allan 2015; Drummen 2015: 51; Langslow 2000; Krylova 2006; Schrickx 2011; Aijmer 2002: 26).

Under Kroon's framework, $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\nu}$ can be considered to be presentational (see Wakker 1997; Bakker 2009: 61; George 2009: 167; Allan 2015).³² Consider the following quotes, all from Stage III research on Ancient Greek connective particles:

"[D]iscourse is not just a series of linearly ordered speech acts, but consists of hierarchically ordered units. To ensure a successful communicative act, these units in some way or other must cohere. Particles are an important means to signal coherence." (Rijksbaron 1997b: 3)

"In the study of Greek particles, very little attention has been paid so far to text structure. The underlying assumption of most studies in this field is that text is a monolithic sequence of clauses and sentences. The aim of this paper is to show that this assumption leads to inadequate descriptions. Especially POP particles [these are particles which signal a return to a higher level of the hierarchical discourse structure, SZ] tend to mark the coherence not between two successive clauses or sentences but between discourse units" (Slings 1997: 102).

"According to recent studies, both particles [$\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\nu}$, SZ] have a text-organizing function and therefore contribute to discourse cohesion [i.e., coherence, SZ]." (Bakker 2009: 41)

"[C]onjunctions perform a variety of discourse functions. These include the linking function [...]. This linking function occurs at a variety of levels of discourse, from the linking of words up to the linking of paragraphs. These levels of linkage are endemic to what constitutes discourse, and contribute in significant ways to its cohesion [i.e., coherence, SZ]." ... "[C]onjunctions are used to cohere [sic] and differentiate the segments of a discourse" (Porter & O'Donnell 2007: 6).

Given that connective particles in Ancient Greek are now almost exclusively described in terms of their discourse function, they may be analyzed less as 'connective particles' and more in line with their function at the level of discourse coherence (in Kroon's terms, at the presentational level). As Zwicky (1985: 291) points out, 'particle' is an "entirely negative characterization" of a linguistic item – it is a 'wastebasket' category (in Bar-Hillel's (1971) sense) in that it contains a host of items which are difficult to subsume under a discrete grammatical or semantic category (see also Schourup 1999: 229). They stand outside of the clause proper from a syntactic point of view; their meaning is difficult to describe; and it is not clear whether they are words, affixes, clitics, or something in between those categories (Aijmer 2002: 16; Grimes 1975: 93; Zwicky 1985; see footnote 1 as well). Coherence approaches offer a solution: the meaning of these items should be described in pragmatic terms – they function at the level of, and contribute to, discourse coherence. In that sense, the focus of research has

³² Allan (2015) re-classifies $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\nu}$ at what amounts to Kroon's interactional level, but he still regards them as "discourse-structural", i.e., as DMs which mark "functional relations between discourse units".

shifted. Whereas earlier analyses concentrated predominantly on particles' grammatical and semantic characteristics, discourse analyses now take into account the wider (linguistic and non-linguistic) context which may influence the use and function of particles (Risselada & Spooren 1998: 131).

Many different notions have been proposed to replace 'particle' as a cover term, most of them meant to give a sense of their importance to discourse – 'discourse marker' (e.g. Schiffrin 1987), 'discourse particle' (e.g. Fischer 2006a), 'discourse operator' (e.g. Redeker 1991) and 'discourse landmark' (Celle & Huart 2007) are some of the terms used to refer to (among other linguistic items) what was considered a 'particle' before.³³ I will use the term 'discourse marker' here, after the seminal article on their characteristics by Schourup (1999). As Bonifazi (2012) points out, 'discourse marker' is to be preferred to 'discourse particle' (one of the more popular terms) for the same reasons that the term 'particle' in general has fallen into disuse – historically, 'particle' is "simply a collective noun for all the indeclinable and short words that are not otherwise classifiable". At any rate, the name I choose to give matters very little – the more important question is what we consider to be a discourse marker (or discourse particle, or...), and what we do not. This has been a matter of lively debate for at least twenty-five years, and we will need to go into some detail in order to get a sense of the defining traits of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\nu$.³⁴

Discourse markers: defining traits

The literature on what I call 'discourse markers' is vast and often puzzling (Fischer 2006b: 1). There is widespread disagreement on several related topics, even if we leave the question of the different appellations aside:

- Which linguistic items should be 'invited to the party'?
- What are the defining characteristics of a discourse marker? Is this a semantic class, a pragmatic class, both, or something else?
- Should we make subdivisions within the class of discourse markers? If so, then how should these lines be drawn?

³³ See also Blakemore (2002: 1-3) on this terminology debate. 'Cohesive device', as used by Halliday & Hasan (1976) and explained above, is another alternative, but it has fallen into disuse.

³⁴ Wierzbicka (1986: 520-521) argues that the "extraordinary level of difficulty" in dealing with particles had led to their relative theoretical neglect up to that point. It is safe to say that the intervening years have seen an explosion in research on particles, and that particles today are anything but neglected.

In this paragraph, I will attempt to provide some measure of clarity on these (and other) questions. However, there are several major strands of research which I will not get into. Most importantly, my discussion leaves the topic of discourse markers' diachronic derivation out of the equation, and sidesteps the thorny controversy of whether this is a process of grammaticalization.³⁵ We simply do not know how $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\ddot{\upsilon}\nu$ evolved into the discourse markers they are in the Ancient Greek which is still available to us (although there were, certainly in Stage II particle research, some spirited attempts to determine their provenance³⁶), and any hypotheses would amount to, for all intents and purposes, baseless speculation (see Martín López 1993: 219-220).

According to Schourup's (1999) survey, 'discourse markers' (DMs) as a functional class of linguistic items are defined by three "necessary attributes" (id.: 232).³⁷

(24) a. Connectivity: discourse markers relate one discourse segment to another (See also e.g. Van Dijk 1979: 448-449; Aijmer 2002: 37; Fraser 2006a; Lenk 1998a: 256; Moeschler 1989; for Ancient Greek, see e.g. Loudová 2009a: 297; Wakker 2009: 63; also already Dionysius of Thrace in (2) *supra*.)

b. Optionality: DMs are optional in two distinct senses – they are syntactically separate from the clause they mark, and they are semantically optional in that "they do not enlarge the possibilities for semantic relationship between the elements they associate" (Schourup 1999: 231). In other words, they do not create semantic (or coherence) relations between discourse units, but only mark them. (See also e.g. Blakemore 2004: 222; Heine 2013: 1209; Fraser 1999: 944; for Ancient Greek, see e.g. Bakker & Wakker 2009: xiv; Sicking 1993: 6.)

c. Non-truth-conditionality: DMs do not influence whether the proposition they mark is true or false.³⁸ (See also e.g. Blakemore 2004: 222; Bazzanella et al. 2007: 11; Heine 2013: 1212; Grice 1989; Moeschler 1989; for Ancient Greek, see e.g. Black 2002: 45; Sicking 1993: 6.)

³⁵ For discussion and further references, see especially Degand & Evers-Vermeul (2015), Heine (2013), Eckardt (2006), Brinton (2008) and Diewald (2011).

³⁶ See Denniston (1954²) for an overview of the most commonly accepted ideas in this respect for $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\ddot{\upsilon}\nu$.

³⁷ See Bonifazi (2012) for a more up-to-date survey of DM research, also (and specifically) as it relates to Ancient Greek DMs.

³⁸ Note that this would preclude particles which establish logical relations (see (13e) *supra*) from being considered discourse markers.

These criteria lead to a broad class of linguistic items, which would include (for English) *but, so, for; I mean, you know; on the other hand; unfortunately, frankly; oh, damn* and so on.

(25) a. ‘The restaurant industry is the second largest employer in the U.S., providing jobs for nearly 11 million Americans. It’s also one of the country’s fastest-growing industries; revenues have risen every year since 2010.

But the reality of being a restaurant worker isn’t nearly as rosy.’ (from ‘The hidden cost of waiting tables’, by Saru Jayaraman. TIME Magazine (February 1st, 2016), p. 17.)

b. ‘Why Samuel left the stone house and the green acres of his ancestors I do not know. He was never a political man, *so* it is not likely a charge of rebellion drove him out, and he was scrupulously honest, which eliminates the police as prime movers.’ (from *East of Eden* (1952), by John Steinbeck. Penguin Books, 1992, p. 12.)

c. [From an interview with basketball legend Kobe Bryant:]

Q: ‘How has your relationship with Gregg Popovich [the long-tenured coach of one of Kobe Bryant’s biggest rivals, SZ] evolved?

A: ‘It’s been amazing. *I mean*, he’s been so open with me and I’ve been a sponge every chance I get to be around him. I talk to him a lot about the game, I ask him questions about the game, how he teaches the game.’ (from ‘Morning Shootaround – Feb. 7’ on the NBA.com Hang Time Blog by NBA.com staff.³⁹)

d. How bad is meat for me? *Frankly*, the experts don’t know (Headline for article on the Guardian website, by Sarah Boseley⁴⁰ (26th of October, 2015).)

e. [The narrator is describing the participants in a medieval-style tourney.]

‘When the Knight of Flowers made his entrance, a murmur ran through the crowd, and [Ned Stark] heard Sansa’s fervent whisper, “*Oh*, he’s so beautiful.”’ (from *A Game of Thrones* (1996), by George R.R. Martin. Voyager paperback, 1998, p. 314.)

In (25a) and (25b), the propositions marked by ‘but’ and ‘so’ respectively would be true even if ‘but’ and ‘so’ were deleted – they are non-truth-conditional. They are also semantically and syntactically optional, and, of course, connective – ‘but’ in (25a) marks the proposition as denying, in some sense, an expectation raised by the previous discourse (based on the previous utterances, you wouldn’t expect things to be bad for restaurant workers; cf Iten 2005: 109). In (25b), ‘so’ marks the utterance as being inferentially derived from information contained in the previous discourse (cf. Fraser

³⁹ Accessed via <http://hangtime.blogs.nba.com/2016/02/07/morning-shootaround-feb-7-3/>, on the 10th of February, 2016.

⁴⁰ Accessed via <http://www.theguardian.com/lifeandstyle/2015/oct/26/how-bad-is-meat-for-me-frankly-the-experts-dont-know>, on the 10th of February, 2016.

1999: 948; Buysse 2012: 1765) – if someone is not politically inclined, he will probably not foment or participate in rebellions, so Samuel was probably not driven from Ireland because of political reasons (more specifically, participating in a rebellion). In (25c), ‘I mean’ marks an elaboration (Fraser 1999: 948) of the previous utterance; that is, a “speaker’s modification of his [...] own prior ideas” (Schiffrin 1987: 299) – Bryant goes into a more detailed description of how his relationship with Coach Popovich is ‘amazing’. ‘I mean’ can be deleted without changing the truth or falsity of the proposition, and it connects the utterance it marks to the previous discourse. ‘Frankly’, in (25d), is non-truth-conditional (Ifantidou 2001: 109-110) and marks the speaker’s attitude towards her utterance: here, the information that the utterance which follows will be a frank answer to the preceding question. In (25e), finally, ‘oh’ marks Sansa’s current state of mind – she is blown away by the Knight of Flowers’ beauty, and ‘oh’ marks ‘he’s so beautiful’ as being an affective reaction to what she is seeing right now (cf. Schiffrin 1987: 74). Like *frankly*, then, *oh* encodes information about the speaker’s attitude.

Some of these expressions can also be used differently, i.e., in contexts where the same word is used non-connectively and/or non-optionally and/or truth-conditionally:

(25’) c. ‘The best (and I mean the very best) throwbacks in all of professional sports are the Los Angeles Kings throwbacks.’ (from ‘Like/Dislike: A case of the first-round blues’, by Adam Rank⁴¹ (November 13th, 2015).)

d. “We needed 19 points to win today, you would expect us at home to score 19 points,” a glum Aaron Rodgers said *frankly*, per the Associated Press.’ (from ‘McCarthy won’t call plays despite Packers’ struggles’, by Kevin Patra⁴² (November 16th, 2015).)

In these cases, they cannot be considered DMs. In (25’c), ‘I mean’ cannot be deleted without making the sentence ungrammatical; in (25’d), the truth or falsity of the proposition ‘a glum Aaron Rodgers said the previous utterance *frankly*’ depends, among other things, on whether Aaron Rodgers spoke *frankly*.

The criteria in (24) lead to two main problems with the notion of discourse markers. First, the criteria in (24) are not enough to distinguish a tightly circumscribed set of items; second, the criteria in (24) are themselves problematic. Let’s deal with each of these problems in turn.

⁴¹ Accessed via <http://www.nfl.com/fantasyfootball/story/0ap3000000579144/article/likedislike-a-case-of-the-firstround-blues>, on the 10th of February, 2016.

⁴² Accessed via <http://www.nfl.com/news/story/0ap3000000581236/article/mccarthy-wont-call-plays-despite-packers-struggles>, on the 10th of February, 2016.

The first problem is derivative of discourse markers' status as a functional (and not a separate formal or syntactic) class of items (Hansen 1997: 155; Fraser 1999: 943; Schiffrin 1987: 31). This explains why the term can be used to designate such a disparate group of expressions as those in (25). The label 'discourse marker' can be used to refer to connective particles such as *but*, *for*, *so*, etc.; sentence adverbials (*unfortunately*, *frankly*), parenthetical clauses centered around a verb (*you know*); interjections (*oh*, *damn*), and so on (see De Klerk 2005: 1184-1185 for a more expansive list). This diversity in formal characteristics and syntactic identity is reflected in their function: *but*'s function, for instance, is very different from that of *oh*. In other words, the criteria in (24) lead to an open-ended category which unites an extremely diverse set of items.

This open-endedness has led many scholars to add subcategorizations or additional criteria in order to develop a more fine-grained approach to the notion of DMs (see e.g. (28) *infra*, as well as footnote 47). This, in turn, has led to two further problems: there is (a) no definitive, exhaustive list of DMs in English (or any other language) (Seneviratne 2005: 360); and (b) no commonly accepted definition of what a DM is either (Bazzanella 2006: 450; De Klerk 2005: 1184) – as such, there is no obvious way to delineate where the category of DMs ends and 'something else' begins (Jucker 1993: 436; Blakemore 2004: 221). In sum, no one really agrees on what a DM actually is, what we should call it, how it should be distinguished from other items, and whether (and how) we should distinguish different subcategories. As Fischer (2000: 13) puts it,

"It is notorious in the literature on discourse particles, discourse markers, interjections, hedges, connectors, segmentation markers, modal particles, feedback signals, cue phrases, filled pauses, etc. that the scope of every investigation has to be defined anew [...]. The great number of different descriptive terms for this heterogeneous group indicates that firstly there is no single accepted word class definition, and that secondly the terms chosen depend very much on the perspective under which discourse particles are studied".

Despite the lack of a unitary approach, most scholars agree that the characteristics in (24) are fundamental to the concept of a DM. However, even these traits are, to a certain extent, controversial. This is the second problem with the criteria in (24) – only (24b) can be accepted as an undeniable feature of DMs.⁴³ As to (24a), it is not clear that all discourse markers are connective in the sense that they relate discourse segments. Discourse markers such as *say* (as in "Say, isn't that – " Lance started, but Buck

⁴³ And even here, there is some controversy. Although DMs are not necessary for semantic completeness or syntactic well-formedness, there is evidence to suggest that they are crucial for fast and easy utterance understanding (Millis & Just 1994; Brinton 2008: 17; Heine 2013: 1212). As such, they would not be entirely optional from the perspective of utterance processing.

answered before the question was even asked’ (Brinton 2008: 75)) or *you know* (as in ‘Elvis, *you know*, he started out taking medications because of a grueling [sic] schedule but you know casual use went to abuse’ (Vincent et al. 2009: 216)) do not seem to relate one segment to another – *say* is used “to both catch the attention of and solicit a response from the hearer” (Brinton 2008: 89), and *you know* is used “to mark a piece of information as (supposedly or hopefully) already known by his/her addressee(s)” (Vincent et al. 2009: 209). These DMs, in other words, are both optional and non-truth-conditional, but non-connective (see also *frankly* in (25d) and *oh* in (25e)). All of these markers function on a different discourse plane (cf. *supra*) than a strictly discourse-organizational one – presumably, some sort of interactional discourse level which indexes the relationship between speaker and hearer (see also Fischer 2006b: 7). Strictly speaking, however, any item or expression which has been analyzed as a DM but does not connect discourse segments should be excluded from the discussion of what constitutes a DM.

In the same vein, certain items which are unmistakably connective, optional and non-truth-conditional can occur discourse-initially, as in the following examples:

- (26) a. [Someone gives the speaker, who has just received a shock, a glass of whisky]
 ‘But I don’t drink.’ (from Blakemore 2002: 105)
 b. [The hearer has arrived home laden with parcels]
 ‘So you’ve spent all your money.’ (from Blakemore 2004: 238)

There are no other discourse segments to which the segments marked by ‘but’ and ‘so’ can be related here. This would mean that even obvious DMs (that is, DMs which comply with all the criteria in (24)) can be used to connect something else than discourse segments, which would open the discourse marker door for items like *say* and *you know* again. For example, they could be taken to ‘connect’ an utterance to speaker or hearer attitude, or to speaker or hearer assumptions about their relationship (see e.g. Redeker 1991: 1168; Kroon 1995: 89; Heine 2013: 1211). (24a) would then have to be reworked to include the possibility that DMs can relate one discourse segment to a non-propositional attitude (as in e.g. (25d) or (25e)) or a non-verbalized assumption (as in e.g. (26)).

(24c) is not without its problems as well. Consider the following example:

- (27) If the council fails to repair a pothole and so you break your leg, you should sue.
 (from Wilson 2016: 9)

As Wilson (*ibid.*) points out, there are three conditions which need to hold in order for (27) to be true: the council fails to repair a pothole; the referent of *you* breaks his leg; and, crucially, this referent breaks his leg as a consequence of the council’s failure to

repair the pothole. So, then, seems to contribute to truth conditions in the sense that it points to a consequence which needs to be true in order for the proposition as a whole to be true.⁴⁴

As to $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$, we have already seen that they are regarded as connective in the sense outlined in (24a). They are also regarded as syntactically optional and semantically optional. Whether they are (all and always) non-truth-conditional is another matter. In example (20) *supra*, $\omicron\tilde{\upsilon}\nu$ seems to be non-truth-conditional in marking unit 4; on the other hand, $\gamma\acute{\alpha}\rho$ seems to be truth-conditional in unit 5. We can bring this out through the scope test made famous by Cohen (1971):

(20') If Phaeax did the Locrians no harm $\gamma\acute{\alpha}\rho$ they had already entered into a treaty with the Athenians, he will not be subject to derision.

In this hypothetical example, Phaeax will not be subject to derision if his inaction against the Locrians was induced by the knowledge that they had signed a treaty with the Athenians. If Phaeax did them no harm because he was scared of them, for instance, he would be subject to derision. Note that, in this case, it could still be true that the Locrians had entered into a treaty with the Athenians, but unless this fact had given rise to Phaeax' refusal to do the Locrians harm, (20') would not be true. As such, (20') can be true only if the treaty between the Athenians and the Locrians was causally responsible for the fact that Phaeax did the Locrians no harm – as a result, $\gamma\acute{\alpha}\rho$ can be considered to be truth-conditional here (see Ifantidou 2001: 102-103). In coherence terms, it would seem as if $\gamma\acute{\alpha}\rho$ here does not function at Kroon's presentational level but, instead, at her representational level – it connects two discourse segments based on a causality which holds in the 'real world' (and is, hence, similar to (16a) above). At the very least, then, the criterion of non-truth-conditionality does not seem to apply straightforwardly to $\gamma\acute{\alpha}\rho$. As we will see (§4.2.1), $\gamma\acute{\alpha}\rho$ examples like the one in (20) can be reanalyzed non-truth-conditionally, which would mean that a DM analysis would remain possible.

$\omicron\tilde{\upsilon}\nu$, we will see (§5.2.2), can also seemingly contribute truth-conditional meaning to the proposition – but for these examples, as for the $\gamma\acute{\alpha}\rho$ ones, there could be other factors at play. It could also be the case that we are dealing with contamination from similar DMs in other languages which demonstrate some functional overlap with $\omicron\tilde{\upsilon}\nu$ (such as *so*). The thorny issue of truth-conditionality can be sidestepped entirely, however, by having recourse to the relevance-theoretic framework, which is to be the methodological backbone of my analyses of $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ – it offers us the theoretical

⁴⁴ See also footnote 28 in §5.2.2 on $\omicron\tilde{\upsilon}\nu$'s truth-conditionality. Bach (1999: 332) argues that *but*, which is commonly assumed to be non-truth-conditional, is truth-conditional as well.

machinery to approach DMs from a perspective which does not require non-truth-conditionality to be a hallmark of these items.

Of course, this discussion may have only complicated matters further – if the characteristics in (24) cannot be considered to be criterial for determining what a DM is, then how can we distinguish them? Although it may seem like I am waving the white flag here, it would seem best, for the moment, to take the criteria in (24) as the foundation for our account. Even if there are clear problems with them, they are commonly accepted as foundational traits of a DM – especially so for $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\breve{\nu}$ (which is what I am ultimately interested in). One of the most clear-cut models of DMs which is based around the parameters in (24) was developed by Bruce Fraser (1990, 1996, 1999). Fraser introduces the category of ‘pragmatic markers’:

“I assume that sentence meaning, the information encoded by linguistic expressions can be divided up into two separate and distinct parts. On the one hand, a sentence typically encodes a proposition, perhaps complex, which represents a state of the world which the speaker wishes to bring to the addressee's attention. This aspect of sentence meaning is generally referred to as the propositional content (or content meaning) of the sentence. On the other hand, there is everything else: Mood markers such as the declarative structure of the sentence, and lexical expressions of varying length and complexity. It is on this "everything else" that I will focus. Specifically, I propose that this non- | propositional part of sentence meaning can be analyzed into different types of signals, what I have called Pragmatic Markers” (Fraser 1996: 167-168).

These ‘pragmatic markers’ are, then, non-propositional⁴⁵ expressions associated with specific types of utterances. They can be subdivided into four categories:

(28) a. Basic pragmatic markers: point to the illocutionary force of the utterance. Examples include *please* and performatives such as *I promise*.

b. Commentary pragmatic markers: these allow the speaker to comment on her proposition – sentence adverbials such as *frankly* or *unfortunately* go here.

c. Parallel pragmatic markers: these “signal an entire message separate from the basic and any commentary messages” (Fraser 1996: 168). Examples include vocatives (like *Mister* and *sweetie*) and expressives like *damn*.

d. Discourse pragmatic markers: these signal “how the basic message is related to the foregoing discourse” (id.: 169). Examples include *so* and *however*.

⁴⁵ ‘Non-propositional’ here should be taken to mean that these expressions can be deleted without affecting the truth conditions of the utterance. As such, it is a synonym for ‘non-truth-conditional’ (cf. Fraser 1999: 944; also Heine 2013: 1210) – only propositions can carry truth values (Huang 2007: 11-12).

All four types can occur in one sentence, although it does not happen often:

(29) I appreciate that you are a member of the Police Benevolent Association and a supporter of the baseball league. However, quite frankly Sir, I estimate that you were going a bit more than 86 miles per hour (from *ibid.*).

On Fraser's analysis, 'I estimate' is a basic pragmatic marker which signals the force of the proposition; 'quite frankly' is a commentary pragmatic marker which comments on the proposition; 'Sir' is a parallel pragmatic marker which signals a message "in addition to the basic message" (*ibid.*); and 'however' points to the relationship between the proposition and the preceding discourse.

Following this categorization, discourse markers such as *but* and *so* would belong in (28d), while interjections such as *damn* belong in (28c), and illocutionary adverbials and expressions like *you know* would belong in (28b) (cf. also Fraser 1999: 942; De Klerk 2005: 1185). In other words, we are back where we started: the only linguistic items which are truly 'discourse markers' are those which play some non-truth-conditional, optional role in relating a discourse segment to a preceding discourse segment (Fraser 1999: 938). However, we get a more perspicuous model which introduces subcategorizations, and hence distinguishes between items which are as intuitively different as *but* and *oh*. Non-connective pragmatic markers are optional and non-truth-conditional, but they belong in different categories based on their other, non-connective traits (such as 'signal illocutionary force' or 'signal speaker's commentary') – *frankly*, as in (25d), would belong in (28b), while *oh*, as in (25e) would belong in (28c). Of course, this model still has to deal with the second problem outlined above – connectivity and non-truth-conditionality are problematic notions, especially as they relate to DMs.⁴⁶ For now, though, I will take up Fraser's definition of a discourse marker, and assume that only those items which *can* signal relations between discourse segments are DMs – they are, in that sense, involved with establishing coherent discourse at Kroon's presentational level of discourse (see also Taboada & Gómez-González 2012: 17).⁴⁷ In this sense, then, the coherence and discourse marker research strands are tightly connected.

⁴⁶ There is also the matter of the neat distinctions in (28) breaking down when confronted with actual data. Norrick (2009: 889) argues that interjections (i.e., parallel pragmatic markers) can also function as discourse pragmatic markers in that they can signal contrast, elaboration, and so on. If this is true, Fraser's categorization would collapse. In addition, I would think that several scholars would disagree with Fraser's inclusion of expressions like *I promise* and *I estimate* in the class of discourse markers – 'I estimate' in (29) is not optional in the same way as 'however' is, for instance.

⁴⁷ Fraser's model has gained traction among a reasonable number of scholars. Brinton (2008) proceeds from Fraser's model of pragmatic markers; Hansen's definition of DMs (1997: 160) is similar in that it takes discourse markers to be items "whose primary function is connective". Lenk's definition of DMs (1998b) is also based

1.2 The current approach to δέ, γάρ and οὖν: a summary

I adopt Fraser's definition because δέ, γάρ and οὖν have traditionally been described as discourse markers in his sense in Ancient Greek linguistic research. While there are other particles which may be interpreted differently (such as ἤπου ('surely', cf. Koier 2013; Zakowski 2014b), which would probably be analyzed as a commentary pragmatic marker under Fraser's framework⁴⁸), there are many studies which argue that δέ, γάρ and οὖν function as connectives which relate discourse segments to each other in some way.⁴⁹

Existing approaches to δέ, γάρ and οὖν describe them, then, as non-truth-conditional items which relate discourse segments to each other, and which are semantically and syntactically optional. In this way, they contribute to the coherence of the discourse – more specifically, they point to the coherence relations underlying a text. This construal of discourse markers dovetails nicely with Kroon's presentational level – on Fraser's definition, DMs contribute to the organization of the discourse, and, as such, contribute to Kroon's presentational level of discourse.⁵⁰ Although a broader discussion of previous analyses of δέ, γάρ and οὖν will have to wait, I will summarize the current

entirely on their role in establishing discourse coherence. Loudová (2009a: 297; 2009b: 192) takes the same exclusive definition for her treatment of Byzantine discourse markers.

My adoption of Fraser's model (for now) should, however, not be taken to mean that there is some sort of widespread agreement on his parameters. Fuller (2003) and Macaulay (2002), for instance, still regard *you know* as a discourse marker; Heine (2013: 1208) includes it in his list of 'paradigm English DMs'. Lenk (1998b) argues that DMs should be short – presumably, this would mean that *you know* would be excluded. This would also mean that *in other words* would be excluded, which, according to Fraser, is a true discourse marker (1990: 388). Schiffrin (1987) has a much broader view on what constitutes a discourse marker – she includes *but* and *and* under its umbrella, as Fraser does, but she also adds, for example, *y'know*, which, as stated, would be classified as a commentary pragmatic marker under Fraser's model. Heine (2013: 1211) also takes DM to be a more inclusive category – DMs function not only in establishing relations between discourse segments, but also in relating an utterance “to speaker-hearer interaction” and “speaker attitudes”; Risselada & Spooren's definition of DMs (1998: 132) is similar to Heine's in that it expands the notion of DM *vis-à-vis* Fraser, but it still focuses on DMs as indicators of coherence relations. Pons Bordería (2008) takes 'discourse markers' as his overarching hyperonym and 'connective' as the term corresponding to Fraser's 'discourse (pragmatic) marker', but, as far as I can tell, this is a predominantly terminological (and not conceptual) issue.

⁴⁸ As such, ἤπου would not be considered a connective particle in Stage II research either.

⁴⁹ Note that Bakker (2009) argues that οὖν can function at Kroon's (1995) interactional level – in some cases, the speaker uses οὖν to indicate that she expects a “reaction of approval” (2009: 58). In other cases, she argues, it functions as is usually assumed – at the presentational level.

⁵⁰ To reiterate: not all analyses of Ancient Greek DMs use Kroon's framework. Most of them, however, are influenced by the same principles. Porter & O'Donnell's (2007) model of discourse coherence, for instance, is different from Kroon's, but it is still a coherence framework.

consensus on their meaning and function, which I presented in more detail earlier in this chapter.

Δέ, γάρ and οὖν's function is commonly described in terms of the discourse hierarchy – γάρ introduces a subsidiary discourse segment, while οὖν marks a return to a higher level of the hierarchy.⁵¹ They are, then, often analyzed as two sides of the same coin (see e.g. Sicking 1993: 48). Γάρ and οὖν are also often described in terms of the coherence relations they mark – γάρ usually introduces a segment with the coherence relation of Explanation (see unit 5 in example (20) above – it explains why Phaeax didn't fight with the Locrians), while οὖν often marks a Conclusion relation (see unit 4 in example (19) above – it draws a conclusion from the information provided in the previous segments). Δέ, finally, usually establishes 'neutral' transitions between discourse segments – i.e., transitions without an associated coherence relation (see example (21)).

In sum, δέ, γάρ and οὖν are today described as discourse markers which contribute to discourse coherence at Kroon's presentational level – or, for those publications which do not use Kroon's framework, in terms of their contribution to the coherence of the discourse more generally (cf. also Risselada & Spooren 1998: 131-132; Hengeveld & Mackenzie 2008: 54). In the next chapter, I'll discuss what's wrong with this view, and how a semantic analysis of δέ, γάρ and οὖν might benefit from an alternative approach.

⁵¹ See also Redondo Moyano (2004: 30), who argues that γάρ's function "coincide *grosso modo* con el "significado básico" que C. Kroon [...] aísla para *nam*: *subsidiarity*; ambas partículas funcionan, igualmente, en el nivel presentativo". According to Redondo Moyano, then, γάρ and *nam* are almost equivalent. According to Kroon, as we have seen, the 'basic function' of *nam* is to indicate that the discourse segment it introduces is subsidiary to the preceding one (1995: 168).

Chapter 2

What's eating coherence theories – and how to fix it

*I'm standing in the shade and I'm selling lemonade
Six hundred a pint, the going rate off in the A.
--- GUCCI MANE, 'Lemonade' (off 'The State vs. Radric
Davis')*

There are serious problems, both theoretical and practical, with the existing view of both DMs in general and δέ, γάρ and οὖν specifically. These problems fall into three categories:

(The Problem of Unfounded Coherence) It is not clear that coherence exists, or that it is a scientifically interesting concept, or that it has widely applicable theoretical or practical value. More to the point, it is a derivative notion, and even if it wasn't derivative, it would have to deal with some major questions of applicability (and hence practical value) first.

(The Problem of Unfounded Connectivity) If coherence, and hence coherence relations, do not exist (or have no widely applicable theoretical or practical value), then what do DMs connect? In other words, if coherence is a fundamentally problematic notion, then DMs cannot be taken to contribute to coherence, and, hence, cannot be connective in the traditional sense.

(The Problem of Non-Truth-Conditional Meaning) If DMs are non-truth-conditional, what do they contribute to the utterance? Should their description and analysis be a task for semantics, or for pragmatics? If they are part of semantics, then our conception of semantics cannot be truth-based; if they are part of pragmatics, then how can this be squared with the fact that they are arbitrary and that their meaning has to be learned –

in other words, that they have conventional meaning, and that conventional meaning is traditionally the domain of semantics? Put simply: are DMs ‘semantic’ or ‘pragmatic’?

The first problem is related to the very concept of coherence; the latter two are connected to the defining traits of discourse markers outlined in (24). As Blakemore (2004: 222) points out, connectivity and non-truth-conditionality are the two traits which have brought DMs “into the center of pragmatics research”, but they are not as straightforward as coherence theorists seem to think (see also §1.1.3.2).

The three problems outlined here are of such magnitude that it is difficult to accept the foundation on which many existing analyses of DMs (and, in particular, *δέ*, *γάρ* and *οὐν*) rest. The Problem of Unfounded Coherence and The Problem of Unfounded Connectivity entail a rejection of coherence and connectivity (at least as it is conceptualized within coherence approaches), while The Problem of Non-Truth-Conditional Meaning has, as far as I know, not been discussed – let alone laid to rest – in coherence or functional approaches to coherence or DMs. As we will see, these problems (and the lack of acceptable answers provided in coherence models) should lead us to explore different frameworks which *can* deal with them.

I will start with The Problem of Unfounded Coherence – what is the theoretical and practical value of the notion of coherence? I have already mentioned some of the arguments against a coherence approach earlier, but they will be treated in more detail here. The case I aim to build against coherence approaches will also undercut the assumption that DMs contribute to coherence (The Problem of Unfounded Connectivity).

2.1 The Problems of Unfounded Coherence and Unfounded Connectivity

The first two complications for a coherence approach to discourse which will be discussed here have already been touched on – they are presented here in greater detail. Some of the issues discussed here apply to coherence models in general, while others are more narrowly concerned with coherence models specifically targeted towards Ancient Greek. All of these problems, however, are in some way relevant for the set of assumptions underlying every coherence approach – from Halliday & Hasan (1976) to, for example, Dontcheva-Navratilova & Povolná (2009).

Before I begin, I should point out that my criticisms here do not mean that I think coherence approaches in general are pointless, or that they have no place in linguistic

research. Many of these analyses, both for Ancient Greek and other languages, are insightful and have influenced my own work in a positive way. My rejection of the underlying framework is not necessarily a repudiation of the conclusions many scholars have drawn while using it. My point is that these scholars have drawn these conclusions in spite of, and not because of their use of coherence models of discourse.

2.1.1 Low interrater agreement

Coherence models approach discourse as a collection of discourse segments connected by underlying coherence relations. Coherence analysts have attempted to categorize and codify these relations (see §2.1.2), but their approach to this endeavor is largely intuitive. Mann et al. (1989: 19) take up this point explicitly and admit that the type of analysis performed in RST is “necessarily subjective”, but that no other approach is available. They concede, to their credit, that there are “methodological risks” associated with their approach:

“risks of circularity, divergence of analysis from actual function, nonrestrictiveness of the theory, vagueness, indefiniteness of analytic outcome, etc.” (ibid.)

The main problem with their approach, however, lies in the subjective judgment of which coherence relation fits in a given context. As Mann et al. put it (id.: 32),

“It often happens that a text has more than one analysis; it is a normal and predictable outcome, given the way that RST is defined. We and others have had the experience of giving the same text to several analysts, who then created differing analyses, sometimes more than one from an individual analyst.”

This is, of course, a pretty significant obstacle. If the tools available under a certain framework do not (or cannot) lead to, at the very least, a consensus on which coherence relation applies in a given context, the coherence program’s practical applicability seems inherently limited. Spooren & Degand (2010: 242) expand on this problem of potentially low interrater (or intercoder) agreement:

“This type of analysis requires a large number of coding decisions, which are usually based on subtle interpretive differences. Hence they raise the issue of intercoder agreement. [...] Low interrater agreements suggest that the categories used in a theory are vague, in the sense that categorizations are non-replicable, and consequently unfit as a basis for theory building. Despite its importance, there is presently no tradition in the field of corpus-based discourse studies to report agreement measures.”

They continue by pointing out that coherence approaches often do not provide “explicit accounts of interrater agreement”, and that we are hence left in the dark as to how reliable a certain interpretation is (id.: 243). If a discourse segment is taken to indicate Evidence, did all analysts agree? Or did others see it as a Background, or an Elaboration? How many analysts agreed on a given relation? How many relations were proposed for a given utterance? How many analysts were there in the first place? These are important questions, which are usually left unanswered. Spooren & Degand (id.: 254) also point out that where interrater scores are provided, “high agreement scores are rare in the case of the analysis of coherence relations.”¹

Spooren & Degand (2010: 254-255) suggest that part of the reason for low interrater agreement when parsing texts for coherence relations is the influence of context. In order to establish the correct coherence relation, they argue, the analyst (or the hearer) has to supply “contextual information, which in itself can be interpreted in multiple ways”. Take the following example (from Lascarides & Asher 1993: 438):

(1) The council built the bridge. The architect drew up the plans.

Lascarides & Asher (1993: 440) take this to be an instance of ‘Elaboration’, where the second clause (i.e., discourse segment) provides information about the ‘preparatory phase’ preceding the building of the bridge in the first discourse segment. However, one could also parse the relation as being one of Contrast, given the right context. For example, let’s say a councilman is arguing with someone about who is responsible for the bridge. His interlocutor believes that a large part of the credit should be due to the architect, while the councilman, of course, believes that the council should be awarded the lion’s share of the plaudits. In this context, the councilman would utter (1) to make a contrast between the council, who built (i.e., paid for) the bridge, and the architect, who (only) drew up the plans. As such, there is ambiguity between coherence relations here, which can only be resolved if the right (i.e., speaker-intended) context (and other potentially available information such as prosody) is brought to bear on the interpretation of the utterance.

In (1), then, the analyst needs the right contextual information so that he can establish the right coherence relation, so that he can (finally) establish the correct interpretation of the text (see also Blass 1993: 92). As we shall see, however, it is not at all clear why we need an extra step – if the hearer is able to supply the right (i.e., speaker-intended) contextual information, doesn’t this suffice to establish the right (i.e., speaker-intended) interpretation of the text? Take example (1) again: if the hearer is

¹ It should be noted that Den Ouden et al. (1998: 8) report “high consistency” among their coherence analysts.

aware of the context I outlined under the example, does he really need to determine that there is a relation of Contrast between the two discourse segments before he can understand that the speaker is implying that the council deserves more credit for the construction of the bridge? Isn't it possible that, by combining the contextual information provided under the utterance in (1), the hearer is able to understand the speaker of (1) to mean that the council should take a large part of the credit for building the bridge, and that their financial support of the bridge trumps (i.e., should be contrasted with) the planning performed by the architect? There are strong reasons to assume that this is possible, and that we can 'cut out the middleman' – in other words, that we do not need to establish the right coherence relation in order to establish the right interpretation, but that we can proceed from establishing the speaker-intended context to establishing the speaker-intended interpretation without coherence mediation (see e.g. Blass (1990) and Blakemore (2001a), to be discussed shortly). Given that this would presumably be a more cognitively efficient way of processing discourse (and provided, of course, that this alternative account is plausible), there would have to be robust arguments in favor of the position that the recognition of coherence relations is an essential component of utterance interpretation. In light of the low interrater agreement discussed here and the claims against coherence to follow, it is not obvious how such an account would go.²

2.1.2 Internecine disagreement: descriptive inadequacy

This point has been taken up briefly before as well. One of the most baffling aspects of research on coherence is coherence theorists' inability to settle on both a number and a set of coherence relations. Each model seems to propose a new set of coherence relations – Hovy (1990) found more than 350 relations which have been proposed at some time or other. Each model also proposes a different number of coherence relations (see also Knott & Sanders 1998: 136). Grosz & Sidner (1986) have two; Sanders et al. (1992; 1993) identify four 'cognitive primitives' which lead to 17 possible relations; RST had 24 (but in its most recent version, it has 30); Maier & Hovy (1993) have over 70. Some do not specify how many exist (Hobbs 1985; Lascarides & Asher 1993; Kehler 2004;

² Of course, any semantic approach – especially to items in a dead language, and *especially* to items which occur across many different contexts in a dead language – is subjective to some extent, regardless of the framework employed by the analyst. I would argue, however, that coherence theories are more subjective than is needed – not only is the data in need of a necessarily somewhat subjective analysis; crucially, the underlying assumptions of the framework (i.e., the different coherence relations) are themselves also subjective, with no consensus in sight.

Kroon 1995). The disagreement here is such that Hovy & Maier (1995: 4; also Hovy 1990) divide these approaches between ‘profligate’ and ‘parsimonious’ models, where the first position assumes that “(at least) tens” of relations “are required to describe the structure of English discourse”, while the ‘parsimonious’ position entails the belief that two relations “suffice to represent discourse structure”.³ Both options are unappealing:

“The problem with the first position is that the lists are often unmotivated and unconstrained, and that they may lead to analytic problems. The second position is inadequate from the point of view of text generation [...], because text generators need more than only two intentional relations to produce a coherent text.” (Sanders et al. 1993: 117)

This is not a question of whether some peripheral relations should be included or not – the different coherence models do not agree on the identity of *any* of the relations to be included, or the connections between those different relations. Kehler (2004) and Hovy (1990), for instance, propose a hierarchy of coherence relations – an ‘Explanation’, for Kehler, is a form of the more general ‘Cause-Effect’ relation; a Restatement, for Hovy, is a form of Elaboration. Mann et al. (1989), on the other hand, propose no such hierarchy and see all relations as separate entities – Restatement, in their model, is not a type of Elaboration but something distinct and equipollent.

There are also disagreements on whether (and where) to include certain specific relations. Take the ‘Exemplification’ relation. Hovy (1990) does not have an ‘Exemplification’ relation; Kehler (2004: 249) does, as an example of a more general relation (‘Resemblance’). ‘Resemblance’, according to Kehler (2004: 248), “requires that commonalities and contrasts among corresponding sets of parallel relations and entities be recognized, using operations based on comparison, analogy, and generalization” (also Hobbs 1985: 18). Mann et al. (1989: 53) seem to imply that they see Exemplification as a form of Elaboration (although they do not propose a separate relation ‘Exemplification’); Elaboration, for them (*ibid.*), provides “additional detail about the situation or some element of subject matter which is presented” in the central discourse segment. Kehler’s focus on parallels between the discourse segments for Resemblances, then, is not reflected in Mann et al.’s (1989) clear distinction between a subsidiary discourse segment (providing additional detail) and a central discourse segment (of which additional detail is provided) in Elaborations. Another example of the confusion surrounding the inclusion of a relation is centered around the Explanation relation. Kehler (2004: 247) and Hobbs (1985: 13) take ‘Explanation’ to be a coherence relation,

³ Hovy & Maier (1995: 4) quote Grosz & Sidner (1986) here as the only ‘parsimonious’ model.

but it is not included in Hovy (1990), Mann et al. (1989) or Sanders et al.'s (1992, 1993) taxonomies.

Disagreements center on the nature of certain relations as well. A prime example is the 'Elaboration' relation (cf. also Hovy & Maier 1995: 7-8; Blakemore (2001a: 102) for discussion). For Hobbs (1985: 18), an Elaboration is a type of reformulation – with an Elaboration, the hearer has to “infer the same proposition from the assertion” of the central and the subsidiary discourse segment. Hovy (1990: 131) sees Restatement as a form of Elaboration, but does not regard the two as being co-extensive. Halliday (1985) takes an Elaboration to cover reformulations, exemplifications, and those instances where the speaker provides additional detail (see §4). As stated, Mann et al. (1989: 53) regard Elaboration as providing “additional detail” about the central discourse segment. They explicitly do not include a reformulation under this heading – Restatement is a different relation in their model.

Those coherence approaches which are hierarchical do not agree on the type of relations which are primary. Kehler (2004: 246), for instance, following Hume, classifies all coherence relations as belonging to one of three “general categories” of overarching relations (Cause-Effect, Continuity, and, as mentioned, Resemblance). Sanders et al. (1992, 1993), on the other hand, distinguish between four ‘cognitive primitives’ (‘Basic Operation’, ‘Source of Coherence’, ‘Order’ and ‘Polarity’), each of which has two possible ‘states’, and the combination of which leads to a certain coherence relation between two discourse segments. For instance, a ‘Basic Order’ with a ‘Causal Basic Operation’ and a ‘Semantic Source of Coherence’ and ‘Positive Polarity’ leads to a ‘Cause-consequence’ relation; if the ‘Basic Order’ is flipped to a ‘Nonbasic Order’, we get a ‘Consequence-cause’ relation. If the ‘Source of Coherence’ is flipped to ‘Pragmatic’, the ‘Cause-consequence’ relation switches to an ‘Argument-claim’ one (Sanders et al. 1992: 11) – parallel to the distinction between content causality and epistemic causality which has already been discussed (see (16) in §1.1.3). Important to note here is that ‘Cause-consequence’, on Sanders et al.'s view, is a possible outcome of the interaction between the four cognitive primitives; for Kehler (2004: 247), ‘Cause-effect’ is, instead, one of the basic categories of coherence relations, and can itself give rise to coherence relations such as ‘Result’, ‘Explanation’ and ‘Violated expectation’. We are dealing, in other words, with crucial and irreconcilable differences in how to include, define and categorize coherence relations.

Hovy (1990: 134), in his meta-analysis of other coherence theorists' models, admits that there is no way to know whether he (or any other coherence theorist) has managed to include the ‘right’ relations and excluded the irrelevant, unimportant or plain non-existent ones (see also Kehler 2004: 243-244; Sanders et al. 1993: 95). Moreover, it is not clear how we would develop a method for doing this – should we only look for relations which are cognitively or psychologically realistic, i.e., which are activated in the hearer's mind when processing discourse? Or should we look at discourse as an isolated

artifact, and develop an account of all relations which may occur in a given discourse? If we take this latter approach, we should not automatically assume that we are being psychologically realistic – some of the distinctions between the different relations are quite fine-grained, and it is not at all obvious that 70+ relations, for instance, have clear and discrete cognitive counterparts in an individual’s mind. In summary, there is no clear way to deduce which coherence relations exist, and hence no clear way in which we can apply this type of analysis to discourse consistently – existing sets of coherence relations are not “descriptively adequate” (Blakemore 2004: 233). The only solution would be to determine which coherence relations exist – but given that consensus on this point seems next to impossible, coherence relations as a methodological tool for parsing discourse will probably have to be shelved indefinitely.

2.1.3 Terminological and definitional vagueness

Bound up with the previous point is coherence theorists’ vagueness in describing different coherence relations. This problem is endemic to coherence research in Ancient Greek – most coherence theorists who work on English (or cross-linguistically) aim to provide clear definitions of the concepts they use (see especially Hobbs 1985; Mann et al. 1989; Kehler 2004). Although this often leads to opposing views on what a given relation may or may not entail (as outlined in the previous section), the fact that definitions are provided at all is an important step in the direction of a unitary coherence theory.

For Ancient Greek coherence research, however, one is often left to wonder what is meant by a given relation. This terminological vagueness crops up most blatantly with γάρ, which is, more than δέ or οὖν, usually described in terms of the coherence relation(s) it introduces. De Jong (1997: 175), for example, argues that γάρ’s “usual function” is to introduce an “explanation”; however, she does not explain what she means by this. Does γάρ ‘usually’ introduce an Explanation in Kehler’s (2004) or Hobbs’ (1985) sense? If it does not, then should we take it to introduce an Elaboration? If so, is this an Elaboration in Halliday’s (1985) or Mann et al.’s (1989) sense? Or in a different sense? Can it introduce both an Explanation (in e.g. Kehler’s (2004) sense) and an Elaboration (in Halliday’s (1985) or Mann et al.’s (1989) sense)? None of these questions are answered, nor does De Jong provide an alternative of her own.

According to Sicking (1993: 23), γάρ is “primarily explanatory” as well, in that the utterances it marks “supply information in answer to a question which might be raised in the minds of the audience by what has just preceded or is about to follow” (1993: 20). It is not clear how this is to be understood – if it answers a ‘question which might be raised in the minds of the audiences’, does it provide an Explanation for what has been said (or is about to be said)? Or does it ‘Elaborate’ in the sense that it ‘clears up’ something that may have been unclear? Or does this mean that it marks Restatements –

the previous utterance is reformulated in order to clear up a question the audience might have? Or does γáp answer these questions in the sense that it introduces a Background, i.e., supplementary information which may help the audience understand the previous utterance (Mann et al. 1989: 51)? Or can it introduce all of the above? Sicking's (1993) approach, like that of De Jong (1997), is coherence-based in a broad sense, but it is superficial and vague in its description of how the relations underlying the framework should be understood. Bakker (2009: 41) argues that γáp marks its utterance as an "explanation, exemplification [sic] or digression". Again, there is no further information on what is meant by these terms, or how they should be related to each other. It would seem as if 'digression' is something entirely different from 'explanation' – with a digression, no causality is implied. The point is that we cannot be sure, as Bakker provides no more information as to her views on γáp's basic function or meaning.

The same problem arises for Redondo Moyano's (2004) treatment of γáp: she argues that it introduces an elaboration (2004: 30), and then proceeds to give a range of possible contexts which, according to her, fall under the heading of an 'elaboration': causes, justifications, proofs, testimonies, exemplifications, descriptions, 'preceding information' ("información anterior"), and so on. This is an impressive list, but it stretches the notion of 'elaboration' to its breaking point – according to Redondo Moyano's analysis, a large part of *all* coherence relations can be marked by γáp; moreover, some of these relations seem to be quite divergent. It is never made clear how a 'description' is related to a 'cause', for instance, or how such seemingly disparate coherence relations can be marked by one DM. As a matter of fact, it is never explained what a 'description' would entail in the first place. 'Elaboration' here, then, is an ill-defined and overly broad notion, which prevents it from having any value as part of a methodological toolbox for interpreting texts. Additionally, Redondo Moyano's (2004) description amounts to an enumeration of contexts in which γáp occurs, and not an analysis of what γáp *itself* contributes to the discourse semantically.⁴ This is another problem of coherence approaches to DM, which I get into in the next paragraph.

⁴ The same problem arises for DM research in general. Let's take *and* – *and* can be used in its 'neutral', additive sense ('he ate salmon *and* eggs'), but also in e.g. a consecutive sense ('the vase fell *and* [as a result] it broke') and an adversative sense ('Paul can't spell *and* [unexpectedly/by contrast] he is a linguist.' (from Blakemore & Carston 1999: 2)). The question for coherence approaches is whether these different *and*'s indicate different coherence relations, and, if so, how the hearer is able to distinguish between these different coherence relations. How does he know whether *and* marks a Non-Volitional Result, for instance, or a Sequence? If one DM can signal multiple coherence relations, we need a plausible account of how hearers/readers select between them – but, to my knowledge, no such account is available (see Blakemore & Carston (2005) for further discussion of an alternative approach to *and*).

2.1.4 No differentiation between semantic contribution of DM and the context in which it occurs

A fourth problem with many coherence approaches is that they seem happy to simply provide a taxonomy of discourse relations. While this is a useful (and, indeed, crucial) step in any DM account from a methodological point of view, coherence theorists often remain stuck at this level of analysis (see Black 2002: 145). There is no indication in any of the frameworks mentioned above (both those used for Greek and those employed more generally) that a distinction is made between the coherence relation with which a DM occurs systematically (e.g. a Motivation), and the function/meaning of that DM (for a Motivation, e.g. *because* (Hengeveld & Mackenzie 2008: 54)).⁵ On the coherence view, for example, *because* could point to a Motivation. Yet, as Schleppegrell (1991: 328) demonstrates, *because* can also mark non-causal (and hence, non-Motivation) utterances:

(2) The fifth position break is in a lot of dances. Especially in a lot of Latin dances. Because this is the fifth position break.

The same goes for γάρ, for example – as we have just seen, it is usually taken to point to some kind of explanation (De Jong 1997; Sicking 1993) or elaboration (Redondo Moyano 2004). Although these terms are never clearly defined (cf. §2.1.3), it presumably refers to the ‘explanatory’ nature of the contexts in which it usually occurs:

(3) Ἀπορέοντος γὰρ Κροίσου ὅπως οἱ διαβήσεται τὸν ποταμὸν ὁ στρατός (οὐ γὰρ δὴ εἶναί κω τοῦτον τὸν χρόνον τὰς γεφύρας ταύτας), λέγεται παρεόντα τὸν Θαλῆν ἐν τῷ στρατοπέδῳ ποιῆσαι αὐτῷ τὸν ποταμὸν ἐξ ἀριστερῆς χειρὸς ῥέοντα τοῦ στρατοῦ καὶ ἐκ δεξιῆς ῥέειν. (Herodotus, *Histories* 1.75.11-16)

[Herodotus is giving the prevailing account among the Greeks as to how Croesus managed to cross the river Halys:] “When Cræsus was at a loss how his army should pass over the river (not [*gar*] were there yet at that time the bridges which now there are), it is said that Thales, who was present in the camp, caused the river, which flowed then on the left hand of the army, to flow partly also on the right.” (tr. Macaulay (1890), with alterations)

⁵ This problem is critiqued extensively in Kroon (1995) for Latin, and is also discussed in Black (2002: 19) for Ancient Greek. It is still highly relevant for Ancient Greek DM research today.

(4) καὶ πλεύσαντες εὐθὺς πέντε καὶ εἴκοσι ναυσὶ καὶ ὕστερον ἑτέρῳ στόλῳ τοὺς τε φεύγοντας ἐκέλευον κατ' ἐπήρειαν δέχεσθαι αὐτούς (ἦλθον γὰρ ἐς τὴν Κέρκυραν οἱ τῶν Ἐπιδαμνίων φυγάδες, τάφους τε ἀποδεικνύντες καὶ ξυγγένειαν, ἣν προῖσχόμενοι ἐδέοντο σφᾶς κατάγειν) τοὺς τε φρουροὺς οὓς Κορίνθιοι ἔπεμψαν καὶ τοὺς οἰκήτορας ἀποπέμπειν. (Thucydides, *History of the Peloponnesian War* I.26.3.3-4.1)

[After a civil war, the city Epidamnus sends away part of its population in exile. These exiles team up with barbarians and start raiding the areas surrounding Epidamnus. The Epidamnians ask their mother city Corcyra for help, but they refuse; however, Corinth, Corcyra's great rival, agrees to help. This does not sit well with the Corcyraeans:] "And they immediately set sail with five and twenty ships, followed by a second fleet, and in insulting terms bade the Epidamnians receive the exiled oligarchs ([*gar*] the Epidamnian exiles had gone to Corcyra and, pointing to the sepulchres of their common ancestors and their ties of kinship, implored the Corcyraeans to restore them), and they also bade them send away the troops which the Corinthians had sent and the new settlers." (tr. Jowett (1900), with alterations)

In (3), the utterance marked by γάρ explains why Croesus was 'at a loss' as to how he should cross the river – if there weren't yet any bridges, it would be impossible to cross it. In (4), the utterance marked by γάρ explains where the demand by the Corcyraeans comes from – without the addition of the discourse segment marked by γάρ, this demand would seem strange, as we would have no knowledge of contact between Corcyra and the exiled Epidamnians.

However, there are also instances where the 'explanatory'/'elaboration' hypothesis seems problematic – especially in my corpus of texts:

(5) Τῆς δὲ Χαρικλείας ἐκπεπληγμένης καὶ «πῶς ἦν εἰκός, ὦ Κνήμων,» εἰπούσης «τὴν ἐκ μέσης τῆς Ἑλλάδος ἐπ' ἐσχάτοις γῆς Αἰγύπτου καθάπερ ἐκ μηχανῆς ἀναπεμφοῦναι; πῶς δὲ καὶ ἐλάνθανεν ἡμᾶς δεῦρο κατιόντας;» «Ταῦτα μὲν οὐκ ἔχω λέγειν» ἀπεκρίνατο πρὸς αὐτὴν ὁ Κνήμων· «ἂ δ' οὖν ἔχω γινώσκειν ἀμφ' αὐτῇ τοιάδε ἐστίν· Ἐπειδὴ γὰρ ἡ Δημαινέτη μετὰ τὴν ἀπάτην εἰς τὸν βόθρον ἑαυτὴν ἀπεκρήμνισεν, ὁ δὲ πατὴρ ἐξήγγειλε τῷ δήμῳ τὸ γεγενημένον, παρὰ μὲν τὴν πρώτην ἐτύγχανε συγγνώμης, καὶ αὐτὸς μὲν ὅπως ἂν κάθοδον ἔμοιγε λάβοι παρὰ τοῦ δήμου καὶ κατὰ ζήτησιν ἐκπλεύσειε τὴν ἐμὴν διετίθετο, [...]. (Hel. Aeth. 2.8.3.1-2.8.4.5)

[Chariclea is asking who the girl was whom Theagenes mistook for her. Cnemon says it's Thisbe, which causes consternation.] Chariclea was astonished and said: 'How was it likely, Cnemon, that a woman from the middle of Greece should be transported to the ends of Egypt as if by a stage-machine? And how too did we not see her as we came down here?' 'These things I cannot say', Cnemon answered her, 'but what I do know about her is the following (τοιιάδε). When [*gar*], after she had been beguiled, had flung herself into the pit [i.e., had committed suicide, SZ], and my father reported what had

happened to the people, he first obtained their exoneration, and he himself procured from the people the grant of my recall and of his going to sea in search of me, [...].”

In this example, there is no obvious explanatory potential in the utterance marked by γάρ. On Hobbs’ definition (1985: 13), an Explanation explains what caused the “state or event” in the central discourse segment to occur (see also Kehler 2004: 247), but this is not what γάρ marks in this example – the utterance marked by γάρ fills in τοιάδε, making explicit what these ‘following things’ are. As such, it provides the information which Cnemon announced in the preceding utterance. In fact, the information provided in the segment marked by γάρ is not subsidiary at all – it seems to be more central, i.e., communicatively more important, than the segment preceding it. According to RST, communicatively central discourse segments can only be marked by the coherence relations of ‘Sequence’ or ‘Contrast’ – other relations are reserved for subsidiary discourse segments. As there is no clear way in which γάρ would mark a neutral succession or a contrast in (5), only two possible analyses seem open – either γάρ here is communicatively subsidiary in some mystifying (and certainly non-explanatory/elaborative) way, or γάρ can also mark central discourse segments, and its function should be captured in different terms than the ones which have been proposed in the secondary literature.

As we shall see, my corpus also contains examples of δέ which would probably be considered subsidiary on a coherence approach:

(6) οὔτε γὰρ πᾶσι τὰ αὐτὰ, οὔτε ἐνὶ τὰ πάντα, οὔτε τὸν αὐτὸν τρόπον, ὡς τοῖς παρ’ ὑμῖν ἱεροφάνταις δοκεῖ, καὶ τοῖς τῶν θυσιῶν τεχνολόγοις. Ποῦ δέ, ὥσπερ Λινδίοις, εὐσεβὲς τὸ καταρᾶσθαι τῷ Βουθοίνα, καὶ τοῦτο εἶναι θεοῦ τιμὴν, τὰς εἰς αὐτὸν λοιδορίας; ἢ Ταύροις τὸ ξενοκτονεῖν, ἢ Λάκωσι τὸ ἐπιβώμια ξαίνεσθαι, ἢ Φρυγῇ τὸ κατατέμνεσθαι ὑπ’ αὐλῶν κηλουμένους, καὶ ἀνανδρουμένους ὑφ’ ἄλματος, ἢ τὸ παιδεραστεῖν ἄλλοις, ἢ τὸ πορνεύειν ἑτέροις; (Greg. *Iul.* I.640.1-10)

[Gregory is arguing that customs of offering differ from region to region:] “Since all nations have not the same doctrines, nor any single one the sole possession of them; nor yet the same ceremonial, as it is laid down by your own sacred interpreters and directors of sacrifice. Where [*de*], as with the Lindians, is it a religious action to curse the ‘Bull-eater’, and is this a way of doing honour to the god, namely, the reviling of him? Or, as with the Tauri, to sacrifice strangers? Or, as with the Saconeans, to be flogged upon the altar? Or, as with the Phrygians, to castrate yourself when enchanted by the sound of the fife, and emasculated by force of dancing? Or, as with others, to abuse boys, or to prostitute oneself?”

It would seem as if δέ marks an Elaboration here – “additional detail” is provided about a situation presented in the central act preceding the segment marked by δέ

(Mann et al. 1989: 53), in the form of an exemplification about different sacrificial customs.⁶ However, this type of relation can also be marked by γάρ:

(7) Πῶς πάλιν ἀπὸ τῆς αὐτῆς νοτίδος ἐν μὲν τῇ ἀμπέλῳ οἶνος συνίσταται, ἐν δὲ τῇ ἐλαίᾳ τὸ ἔλαιον; Καὶ οὐ τοῦτο μόνον θαυμαστὸν, πῶς ὧδε μὲν τὸ ὑγρὸν ἀπεγλυκάνθη, ἐκεῖ δὲ λιπαρὸν γέγονεν, ἀλλ' ὅτι καὶ ἐν τοῖς γλυκέσι καρποῖς ἀμύθητος ἡ παραλλαγή τῆς ποιότητος. Ἄλλο γὰρ τὸ ἐν ἀμπέλῳ γλυκὺ καὶ ἄλλο τὸ ἐν μηλέᾳ καὶ σύκῳ καὶ φοίνικι. (Bas. Hex. V.8.35-41)

“How, again, does this water become wine in the vine, and oil in the olive tree? Yet what is marvellous is, not to see it become sweet in one fruit, fat and unctuous in another, but to see in sweet fruits an inexpressible variety of flavour. [Gar] There is one sweetness of the grape, another of the apple, another of the fig, another of the date.”

The segment marked by γάρ introduces an Elaboration as well: the παραλλαγή (variety) in sweet fruits is exemplified.⁷ Different DMs would, then, be able to mark the same relation.

If this is right, then the link between DM and coherence relation would collapse – if different DMs can mark the same coherence relation, they would not help the hearer derive the correct (i.e., speaker-intended) coherence relation. As such, there are limits to the explanatory power of a coherence model. While many examples of γάρ may be accommodated under the coherence relation of Explanation or Elaboration, there are also many instances which fall outside of this neat categorization (some of which are not easily described in terms of a coherence relation, as in e.g. (5)). We will see later on that the same problems arise for δέ and οὖν – the first does not mark just transitions between different discourse segments on the same level of the discourse hierarchy (see also (6)), and the latter does not mark just transitions from a lower level of the discourse hierarchy to a higher one. As such, two options are available – either we work towards a hyper-polyfunctional or –polysemous account, in which these DMs have many different functions or meanings according to the contexts in which they occur, or we try to distill a more abstract meaning from these different contexts. As we will see, the second approach is much more straightforward.

⁶ Note that Halliday (1985) takes Exemplification to be a form of Elaboration. If they are taken to be independent relations, the same point can be made – δέ and γάρ can mark the same coherence relations (see example (7)).

⁷ The relation could be one of Evidence as well, as it could be in (6).

2.1.5 Coherence is not a necessary or sufficient prerequisite for utterance understanding

A simple argument against coherence as a prerequisite for discourse understanding (and not a scholarly byproduct of discourse understanding which exists only in the text) is the fact that people generally do not have any problems understanding discourse-initial or isolated utterances (Blass 1993: 94):

(8) [Note attached to empty bottles of milk at the door]
Three bottles today. (from Blakemore 1988: 236)

This utterance cannot be part of a coherent discourse, as it is entirely isolated. Yet it is still understandable as a note from the owners of the house to the milk man – it is a request for three bottles of milk (ibid.).

Consider also the following utterance:

(9) Dogs must be carried. (from Blakemore 2001a: 103)

As Blakemore points out (ibid.), it is clear that this warning plastered everywhere around the London Underground escalators should not be taken to mean to mean that all passengers have to take a dog with them, but that, if you have a dog with you, you should carry him or her when using an escalator. (9) is not a coherent discourse segment – again, as it is isolated, there are no other segments to connect it with. Still, we are able to arrive at the correct interpretation despite this lack of coherence and the segment's inherent ambiguity.

Novels which start *in medias res* are also often incoherent:

(10) 'So now get up.' (from *Wolf Hall*, by Hilary Mantel (2009). Fourth Estate export paperback, 2010, p. 3)

This is the first line in Hilary Mantel's *Wolf Hall*. We do not know who is speaking, or to whom he (or she) is talking. We also do not have any discourse segment to relate this one to, even though (10) is marked by the DM 'so', which, on a coherence approach, usually indicates some kind of inference or conclusion which follows from previous segment(s). (10), then, is not coherent – but it is understandable in the sense that we, as readers, can form hypotheses of what is going on here. We can assume, for instance, that we are thrust right into the action of a fight here, or that a mother is talking to her child to get out of his or her bed, or that someone is talking to his or her dog. We can form these hypotheses despite the fact that this segment is not coherent – it is only from the next segments onwards that we understand that a man named 'Walter' is

fighting with his son (and that he had been fighting him before the story started with (10)), and it is only a few pages later that we are provided with the information that the name of this son is Thomas.

Aristophanes' *Lysistrata* begins with a DM as well (see also (26) in §1.1.3.2):

(11) Ἄλλ' εἴ τις εἰς Βακχεῖον αὐτὰς ἐκάλεσεν,
ἢ 'ς Πανὸς ἢ 'πὶ Κωλιάδ' εἰς Γενετυλλίδος,
οὐδ' ἂν διελθεῖν ἦν ἂν ὑπὸ τῶν τυμπάνων.
νῦν δ' οὐδεμία πάρεστιν ἐνταυθοῖ γυνή·
πλήν ἢ γ' ἐμὴ κωμῆτις ἥδ' ἐξέρχεται.
χαῖρ', ὦ Καλονίκη. (Aristophanes, *Lysistrata* 1-6)
“[Alla] If they were trysting for a Bacchanal,
A feast of Pan or Colias or Genetyllis,
The tambourines would block the rowdy streets,
But now there's not a woman to be seen
Except—ah, yes—this neighbour of mine yonder.
Good day Calonice.” (tr. Lindsay 1926)

Ἄλλά is usually translated as ‘but’, and its “general function” is that it substitutes a previous element for a new one (‘not X but Y’) (Drummen 2009: 152). In this case, of course, there is no previously communicated element to substitute for. As such, its function cannot be described in terms of coherence – it may still substitute for an assumption, but that assumption cannot have been linguistically communicated, and hence cannot be part of any coherent discourse.⁸

There are other examples of incoherent discourse being perfectly understandable. Blakemore (1988: 236) distinguishes between mention and use:

(12) A: What did Susan say?
B: You’ve dropped your purse.

There is both a coherent and an incoherent interpretation for (12): on the coherent interpretation, B would be quoting Susan, and the answer would probably be denoted with quotes: “You’ve dropped your purse.” On the incoherent interpretation, B would

⁸ In this respect, the beginning of Xenophon’s *Hellenica* is also interesting. It starts with a δέ utterance, which would seem to point to an example of discourse-initial δέ. However, most scholars agree that the beginning (Μετὰ δὲ ταῦτα..., or ‘after these things...’) forms a continuation of Thucydides’ *History of the Peloponnesian War* – in which case δέ would still connect the upcoming utterance to a preceding segment (Brown Ferrario 2014: 183).

point out to A that she dropped her purse – i.e., B would not provide an answer to A's question, but would remark on something much more urgent (the fact that A has dropped her purse). In this case, it would not be possible to add quotes, of course (*ibid.*). Both interpretations are possible, and deriving the right one depends on context – if B points to the ground, for instance, and/or his utterance is marked by an urgent intonation, the incoherent interpretation would probably be preferred. The point here is that discourse can be incoherent but still fully and easily understandable, even when an incoherent interpretation is the only option:

(13) A: Where did you put my pen?

B: Oscar's just brought in a mouse! (adapted from Blakemore 2004: 238)

In this case, B's answer cannot be taken to be an answer to A's question – instead, B is (depending on the context) either very excited or distraught about the fact that Oscar has brought in a mouse. Either way, B's feelings about Oscar's actions are such that B feels this information is more important than answering A's question; as a result, B's utterance is incoherent – his or her answer has nothing to do with the question, or with the context opened by A in posing his or her question. Yet A will have no problems in deriving the correct interpretation of B's utterance (assuming that he or she knows who Oscar is).

Examples like (8)-(13) leave one of two options: either discourse-initial, isolated and otherwise incoherent utterances are somehow different from multisegment and coherent utterances in how hearers/readers understand them, or coherence is not a necessary prerequisite for understanding (Blass 1993: 94; Blakemore 2001a: 103). As there has not been any attempt to develop a double-pronged theory of utterance understanding (i.e., the first option), the second option seems to be the only logical outcome (Blakemore 1988: 237; Blass 1990: 20-21).

Utterances, then, can be understandable without being coherent. On the other hand, utterances can be coherent without being understandable:

(14) John was late. The station clock had struck nine. It was time for Susan to start work. She took the first essay from the pile. It was by Mary Jones. Mary had not been well for weeks. The doctor told her to take a holiday. The problem was that she couldn't afford one. Living in London is now very expensive. All central government subsidies to the Greater London Council have been abolished. Paradoxically, this might be seen to follow from the premises of Libertarian Anarchism. The minor premise might be difficult for the reader to discern. Our theorem-providing program does this using a 'crossed-syllogism' technique." (from Blakemore 1988: 233)

Every segment in (14) is related to the previous one via a coherence relation, but the result is nonsense (ibid.). In the same vein, the different coherence relations can be construed in varied ways. Compare (15a) and (15b):

(15) a. Pyongyang has also been sending anti-South leaflets over the DMZ in balloons. Some that landed north of Seoul Tuesday, according to local media, featured an unflattering caricature of Park and warning of "divine vengeance" for what it said were her failures, including the Sewol ferry crisis, the high suicide rate and the Mers outbreak. (from *Washington Post*, 'South Korea's Park vows all-out effort to punish North for provocations,' by Anna Fifield. 16th of February, 2016.⁹)

b. Go down Washington Street. Just pick up your left foot, place it down in front of your right foot, transfer your weight from right to left foot, lift your right foot... (from Blakemore 2001a: 102)

Both examples contain Elaborations in Mann et al.'s (1989: 53) sense – they provide additional detail about the situation presented in the first discourse segment. In (15a), we are given further information about the leaflets presented in the first clause; in (15b), we are given further information on how to proceed down Washington Street. However, while (15a) is acceptable, (15b) is not. If both are Elaborations, but they are not both acceptable, there is obviously something else going on which precludes one of them from being a felicitous utterance.

The same is true for Restatements:

(16) a. [In a review of one of the episodes of the *Mad Men* television series:] Pete Campbell exits the office like he does everything in his life: like an extremely irritating guy who gets everything he wants but doesn't seem to understand he's not owed even more. In other words: my hero. (from *The A.V. Club*, 'Mad Men: "Mystery Date"', by Todd VanDerWerff. 9th of April, 2012.¹⁰)

b. It's a mouse; that is, a small grey furry rodent. (adapted from Blakemore 2001a: 103)

In both cases, we get explicit markers of a Restatement ('in other words' and 'that is'; see Blakemore 1993: 103). In (16a), the description of Pete Campbell is reformulated as overlapping with the writer's conception of his hero; in (16b), the concept of 'a mouse' is

⁹ Accessed via https://www.washingtonpost.com/world/south-koreas-park-vows-all-out-effort-to-punish-north-for-provocations/2016/02/15/f4c6aece-4d3f-4378-b9c0-eccef80c1966_story.html?hpid=hp_hp-cards_hp-card-world%3Ahomepage%2Fcard, on the 16th of February, 2016.

¹⁰ Accessed via <http://www.avclub.com/tvclub/mad-men-mystery-date-71601>, on the 16th of February, 2016.

reformulated. Again, both examples are perfectly fine examples of Restatements; yet only (16a) is felicitous, as the Restatement in (16b) contains information which is presumably already manifest to the speaker's interlocutor. Coherence theories do not offer a solution to this problem – on a coherence view, it is not apparent how we recognize (16b) and (16b) as being infelicitous despite the obvious coherence relations between the different discourse segments.¹¹

Even the presence of a DM, which, on a coherence approach, would explicitly indicate which coherence relation would hold between discourse segments, does not guarantee understanding. Blass takes the following example (1993: 98; see also example (10) above):

(17) There is mist on the hills, *so* the spirits are cooking.

As in example (10), 'so' indicates that the discourse segment it marks should be understood as some conclusion, or the result of an inference. But it is not clear *in what* way 'the spirits are cooking' is a conclusion:

"[A]re we to assume, in interpreting this utterance, that mist is like smoke in the spirit world, so that whenever it is misty on the hills, this is a sign that the spirits are cooking? Or could it be that the spirits of the hills always cook when it is misty, in order to stay invisible? Different assumptions yield different interpretations, even though in both cases *so* introduces a conclusion." (ibid.)

In other words, the assumption 'there is mist on the hills' can be taken in one of two ways as input to the inference which leads to the conclusion 'the spirits are cooking': one interpretation is that mist is like smoke in the spirit world, the other is that mist is a cover for the spirits to stay hidden while they are cooking. Without knowledge of the right context, we will not be able to reach the speaker-intended interpretation of the utterance, despite the fact that we can recognize the correct coherence relation between the two segments due to the presence of *so* (Blass 1993: 97-98). On a coherence approach, however, "the role of the context is restricted to establishing coherence

¹¹ It should be noted that contexts can be thought up under which (16b) would be felicitous – for example, if the speaker had to repeat himself a couple of times, became irritated, and wanted to ridicule her interlocutor for his lack of understanding. However, in most instances, (16b) would be downright strange. The fact that a context can be found under which (16b) makes sense, should not be considered to be evidence for the position that understanding requires coherence; rather, it should be seen against Travis' (2008: 56) insistence that "[r]egardless [...] of what words mean, and of what might actually be said in them, a speaker may mean anything by them, or mean to say absolutely anything at all in using them, hoping to drive home, or insinuate, etc., any imaginable point". It's all about context.

relations” (Blakemore 1988: 236; Blass 1990: 20) – this would not help us here, as the coherence relation has already been established by use of the DM ‘so’.

In sum, then, it does not seem plausible to propose a link between the recognition of coherence relations, i.e., coherence (let’s call this proposition P), on the one hand, and utterance understanding (proposition Q) on the other, of the sort $P \rightarrow Q$. Recognition of coherence relations is neither necessary nor sufficient to attain discourse comprehension (Blakemore 2001a: 103). Yet utterance production is not a free-for-all – although coherence does not seem to be a precondition for utterance understanding, this does not mean that just anything can be uttered (see Blakemore 2001a: 104). Compare (18) with (13) above:

(18) A: Where did you put my pen?

B: Bob Dylan has recorded more than twenty albums.

The difference between (18) and (13) is that B felt that his or her answer in (13) trumped A’s question – B is so enthusiastic (or disgusted) about Oscar bringing in a mouse that he or she thinks this to be more important and urgent than answering A’s question. In (18), by contrast, the information provided by B doesn’t seem to be ‘newsworthy’ in the sense the information provided in (13) is. Yet even here, a context can be thought up in which B’s answer in (18) would be acceptable. Let’s say that A and B had just had an impassioned discussion about how many albums Bob Dylan has released. If B thought that he had recorded more than twenty, for instance, and A did not, then B might utter his or her answer in (18) triumphantly, having looked up Dylan’s discography on Wikipedia, for instance. In that case, B’s answer will be understandable, as A will probably still remember the discussion he or she had had with B. Again, the acceptability of an utterance does not depend on whether it is coherent, but on whether it ‘fits into the context’ in the sense outlined here (see also footnote 11 *supra*). Note also that hearers will usually strain to derive an interpretation which ‘fits into the context’ in this sense, even if an utterance might seem obscure or inappropriate. In other words, discourse understanding seems to be constrained by some principle, even if it is not the principle of coherence (see Blakemore 1988: 245). Coherence would then be a byproduct – a “superficial symptom of something deeper, which is itself the key to comprehension” (Blass 1990: 24; Blakemore 2001a: 114; 2004: 237; Reboul & Moeschler 1996: 66-67; see also Hobbs 1985: 23).¹² Many utterances will be ‘coherent’ in the sense

¹² See also Hobbs & Redeker (1997: 2), who raise the question “of why coherence relations are needed at all in discourse processing, since the inferences they induce can and must generally be derived by other means.” Givón (1995: 59-61) also regards coherence as epiphenomenal.

that the context made available in (the) previous utterance(s) will be important in establishing the interpretation of the next one. As we have seen, though, this is not necessary – discourse can still be perfectly understandable without this contextual continuity, and hence without coherence. If only a subset of all understandable utterances is coherent, then coherence cannot be the key to a psychologically plausible account of utterance understanding.

2.1.6 Psychological implausibility

Of course, there are coherence theories which do not aim to provide a psychologically plausible account of utterance understanding. As Kroon (1995: 96) puts it,

“The proposed classification of coherence relations may admittedly appear to be artificial, given that in actual discourse no clearcut [sic] boundaries can be observed between the various categories [...]. It should be noted, however, that the model serves a rather specific analytical and descriptive goal, and in no way purports to be a full-fledged, general model for the production and interpretation of coherent discourse”.

Put differently, some coherence models aim to give a descriptively adequate account of the product of utterance production, namely texts (Sanders et al. 1992: 3). It may seem, then, that we can make a clean distinction: coherence theories should deal with the product of utterance production, and cognitive theories should deal with utterance production and understanding.

However, there are two complications with this picture. First of all, we have already seen that coherence theories are not descriptively adequate (§2.1.1, §2.1.2). Secondly, many coherence models *do* purport to be psychologically informed, i.e. to be a psychologically plausible model of how people interpret discourse – most explicitly Sanders et al.’s model (1992, 1993), but also e.g. Mann & Thompson’s RST (Mann & Thompson 1986a, Mann et al. 1989). I have already dealt with the first complication; in this paragraph, I will discuss the second complication – how coherence theories which aim to provide a cognitively realistic account of coherence miss their mark – by way of an analysis of Sanders et al.’s model.

The coherence model of Ted Sanders and colleagues was developed primarily in the 1990s (see especially Sanders et al. 1992, 1993; Knott & Sanders 1998). Like all coherence models, it presumes that discourse is made up of discourse segments related to each other by coherence relations. These coherence relations are not described as relations which are internal to the artifact under consideration (i.e., the text), but as cognitive entities:

“the essential property of [coherence, SZ] relations is that they establish coherence in the cognitive representation language users have or make of a discourse.” (Sanders & Noordman 2000: 38)

According to Sanders & Noordman (2000: 39; also Knott & Sanders 1998: 136), coherence relations should not be conceptualized as “analytic tools” employed by scholars to parse texts, but as psychologically real entities which must be derived by the speaker’s audience if the utterance is to be understood:

“constructing a coherent representation of a text requires that coherence relations can be established between text segments, or rather between the representations readers have of text segments.”

Coherence, then, is a property of the psychological representation which hearers have of discourse (Sanders et al. 1993: 94). The role of DMs, on this view, is to “facilitate” utterance processing – if the coherence relation is made explicit by the presence of a DM, the hearer will be able to construct the speaker-intended psychological representation of the discourse more easily and quickly (Sanders & Noordman 2000: 42). If a DM is not present, the hearer will have to derive the coherence relation by himself, and cognitive effort will be increased (Sanders & Spooren 2007: 926).

As outlined in §2.1.2, Sanders et al. (1992, 1993) propose that coherence relations are derived derivatively, through the interaction of different ‘cognitive primitives’. These cognitive primitives are basic categories of human cognition, which can be in one of two ‘states’ in a given utterance (Sanders et al. 1993: 98). To reiterate, these are:

- (19) a. Basic operation: can be causal or additive.
- b. Source of coherence: can be semantic or pragmatic.
- c. Order: can be basic or nonbasic.
- d. Polarity: can be positive or negative. (from Sanders et al. 1992: 11)

Coherence relations, on this view, are “composite” in that they consist of different ‘states’ of these cognitive primitives, which interlock to give rise to specific coherence relations (Sanders et al. 1993: 98):

“The interpretation of a coherence relation is considered to be a process of checking the primitives. The result of this checking is the interpretation of the relation between the discourse segments.”¹³

A causal pragmatic nonbasic positive combination of cognitive primitives, for instance, can result in a coherence relation of ‘Claim-argument’, where the first discourse segment is related to the second as a claim for which an argument is specified in the second segment. If the polarity is changed from ‘positive’ to ‘negative’, we get a ‘Contrastive claim-argument’. If we get an additive semantic positive combination, the resulting relation is a ‘List’. And so on (Sanders et al. 1992: 11).

A first issue for Sanders et al.’s model has to do with the ‘order’ primitive. If the basic operation is ‘additive’, then there is no ‘order’ – that is, it is not ‘basic’ or ‘nonbasic’ in those cases, but just absent. For a ‘List’, in other words, there is no ‘basic’ or ‘nonbasic’ order, as the discourse segments are just added to each other. For the ‘causal’ basic operations, the order *does* matter – if the order is ‘basic’, we get an Argument-claim, for instance; if all parameters except for the order stay the same, we get a Claim-argument. Surely we can question whether the ‘order’ cognitive primitive is indeed a primitive if it doesn’t matter for about half of all possible combinations.

A second problem occurs when the model is confronted with incoherent discourse which is understandable, or coherent discourse which is not understandable. Note that, on Sanders et al.’s model, cognitive effort will have to be expended in order to construct a coherent model of the discourse – in other words, checking the cognitive primitives, and recognizing the resulting coherence relation which holds between discourse segments, are prerequisites for discourse understanding. In §2.1.5, however, I outlined how not all felicitous discourse is coherent, nor all coherent discourse felicitous. If this is true (and I know of no coherence arguments to the contrary), then this would mean that, in some cases, cognitive effort is expended searching for coherence relations which either do not exist (in the case of incoherent felicitous discourse) or do not lead to utterance understanding (in the case of coherent infelicitous discourse). In both cases, valuable time and effort is wasted looking for something which either doesn’t exist or doesn’t matter.

This would mean that utterance processing would be managed non-optimally and, in a way, very crudely and (pardon the pun) primitively. We would look for cognitive primitives when confronted with any utterance – even those utterances where they aren’t present or do not lead to cognitive rewards (i.e., the speaker-intended interpretation of an utterance). In those utterances where they do occur (i.e., coherent

¹³ Unger (1996: 414) points out that Sanders et al. (1993) leave unexplained how this ‘checking process’ would work from a cognitive point of view.

discourse), we would sometimes check for a cognitive primitive which is simply not present (in the case of additive basic operations). Sanders et al. have nothing to say about how to deal with utterances where coherence doesn't exist or is irrelevant (or where one of the cognitive primitives is irrelevant), but a cognitive system which is as rough-hewn as they assume would seem to require some explanation. It is somewhat akin to a farmer who goes out 365 days a year and walks a mile to check whether he can harvest his crops – on some days, this will be worth it (especially in spring), but most of the days (especially in winter), his effort will be wasted, since his crops will definitely not be growing then. You'd assume that this poor farmer would eventually stop going out for his daily checking process and that he would put in place a different method of monitoring his crops. I use this comparison (admittedly rough-hewn itself) to bring out the point that Sanders et al. provide no plausible method for excluding considerations of coherence where they are irrelevant or non-existent, and that they hence provide a cognitively inelegant model of utterance processing.

A cognitively plausible model of utterance processing would have to be more robust than Sanders et al.'s – it would have to be able to deal with all utterances, coherent or not. The easiest way to do this would seem to be to ignore the notion of coherence altogether (in other words, to not go out and check our crops every day) – this is possible, as we have seen, since coherence is neither a necessary nor a sufficient prerequisite for discourse understanding. If coherence is excluded from the discussion, there would be no need to posit cognitive rules about how and where to ignore considerations of coherence. Instead, the model would cover all utterances which are understandable (whether they are coherent or not), and would exclude non-understandable utterances (i.e., nonsense, unfamiliar jargon, irrelevant utterances, and so on).¹⁴

A coherence theorist may raise an objection here. He or she may accept that coherence is not a given (i.e., that there are utterances which are incoherent but understandable or coherent but non-understandable), but that it still needs to be checked for all the same. If an utterance is coherent, then a cognitive process is set in motion whereby the discourse is checked for (for example) cognitive primitives, and a coherence relation is derived. If an utterance is non-coherent, then this cognitive

¹⁴ Sanders et al. (1992: 16-21) present experimental evidence in favor of their hypothesis that their cognitive primitives and coherence relations are psychologically real entities. However, these experiments let their subjects choose a certain coherence relation from a menu of possible relations for each different utterance. There is, of course, no causality here – the fact that people have coherence-based intuitions about how discourse is related, does not mean that coherence relations are cognitively real entities which lead to utterance understanding. Put differently, these types of experiments presuppose that coherence relations are psychologically real, which is exactly what we would like to know.

process would remain dormant. In this way, cognitive effort would be limited to checking for coherence, and the more cognitively effort-intensive process of deriving a coherence relation and a coherent interpretation would only be set in motion if certain expectations were met. This objection (if it exists – I have not encountered it) would be psychologically implausible as well. First of all, this is not a cognitively efficient way of handling stimuli, as we have seen – presumably, we would assume that fine-tuned cognitive systems function elegantly, or, at the very least, that they would not just throw cognitive resources against the proverbial wall to see what sticks. Secondly, and relatedly, this position assumes that a hearer is ‘unboundedly rational’ (Gigerenzer & Todd 1999: 8-10). A hearer would have to first establish whether a text is coherent in order to deduce whether it is worth the effort of looking for coherence (i.e., whether the benefits (the knowledge that the text is coherent) outweigh costs (putting effort and time into deriving that knowledge)). But this is, of course, a catch-22: you can only conclude if something is worth any effort by putting effort into deriving the conclusion whether it is worth any effort. Not only is this conclusion paradoxical, it also leads to an infinite regress – you’d have to consider the cost of putting any effort into deriving a conclusion, but then you’d have to put effort into considering whether this *first* effort is worth the effort, and so on (id.: 11). This cannot be how our cognitive systems work; realistically, our minds have to “make decisions under constraints of limited time and knowledge” (id.: 5). They are *boundedly* rational – they know where to search, when to stop and how to make decisions about the information they process (Gigerenzer & Selten 2002: 8). Coherence models, on the other hand, implicitly assume that our minds are *unboundedly* rational – that they have unlimited time and resources to process information and derive inferences (Gigerenzer & Todd 1999: 8-10). It is cognitively wasteful to look for coherence in this unboundedly rational sense.¹⁵

It is also cognitively wasteful to look for coherence in coherence models which do not propose ‘cognitive primitives’. RST, for instance, also assumes that their ‘rhetorical relations’ are psychologically real, i.e. real “cognitive entities” (Sanders & Noordman 2000: 39).¹⁶ On this view, coherence relations are themselves ‘cognitive primitives’ (although they are not labeled as such) – i.e., cognitively primary and not derivative like in Sanders et al.’s model (Sanders et al. 1993: 97). This presents another problem: if the hearer needs to derive the speaker-intended relation in order to derive the speaker-

¹⁵ Lenk (1998b: 19) also raises the question as to “whether online production of spoken discourse leaves the participants in conversation enough time to process incoming information according to” elaborate taxonomies such as those proposed in Sanders et al.’s model.

¹⁶ Hobbs’ model (e.g. 1979, 1985) also assumes that coherence relations are real cognitive entities (Knott & Sanders 1998: 137-138; Schourup 2011: 2114). Redeker (2000: 239) simply rejects Sanders et al.’s notion that coherence relations are “real mental entities” – according to her, they are “theoretical constructs”.

intended interpretation, how is he able to find the speaker-intended relation? Mann & Thompson assume that the hearer is able to apply contextual information (or ‘background assumptions’) in order to recognize the correct coherence relation, but provide no further information as to how the hearer would be able to do this (Blass 1993: 92). As we have seen (§2.1.1), once context is admitted to the coherence party, it can handle proceedings much more efficiently – we can just cut out the coherence middleman and propose a realistic account where the right contextual information leads to the speaker-intended interpretation of an utterance without the mediation of coherence relations. But there are further questions raised by Mann & Thompson’s proposal. For one, does the hearer search through all contextual assumptions available to him – prior utterances in the discourse, encyclopaedic knowledge, visual and auditory cues from his surrounding physical context, and so on –, and then apply the relevant ones to the process of deriving the correct coherence relation? Again, this would be unboudedly rational – i.e., too effort-intensive and time-consuming. How, then, does he select the speaker-intended contextual assumptions, and how does he know when to stop searching for further contextual assumptions? Coherence analysts are silent on this topic, but it is an essential part of any psychologically realistic approach to utterance understanding. Selecting the right contextual assumptions is what is known as a ‘computationally intractable’ problem (see e.g. Cherniak 1981; Barrett & Kurzban 2006: 629-630; Carruthers 2006a: 14; also Samuels (2000) for more general discussion), and, in cognitive theories of utterance understanding more specifically, the ‘frame problem’ (see also Apperly 2011: 9; Blakemore 1988: 236):

“Cognitive systems, such as ourselves, cannot go through everything they know in order to determine what information is going to be relevant for a particular inference, since this would be an infinite task. Thus, the frame problem is the problem of putting a "frame" around the set of beliefs that need to be brought to bear in the processing of new information.” (Chiappe & Kukla 1996: 529)

This problem is, again, bound up with the notion of bounded rationality – people simply do not have the time or the resources to go through everything they know (and see and hear and so on) in order to derive an interpretation which may or may not be better than one which takes much less context into account. If a cognitive system would take all the contextual assumptions it has available into account when processing an utterance, the process would become computationally intractable: there would simply be too many possible interpretations to compute given the limited time and resources available to the cognitive system (Gigerenzer 2008: 21).

However, let’s say the hearer is somehow able to home in on certain contextual assumptions, and manages to apply them to derive a coherence relation. How does he know that this is the speaker-intended one? To use Mann et al.’s (1989) list of coherence

relations, let's say the hearer decides that a relation of Elaboration holds between two discourse segments. How does he know that another relation (e.g., Restatement) would not fit *better*? Why would he not check all coherence relations to see which one would fit best? After all, no stopping rule is proposed – no coherence model, to my knowledge, proposes how and why people stop looking for an optimal coherence relation, and how they limit their search for a suitable coherence relation (see Gigerenzer & Selten 2002: 8; Gigerenzer 2008: 24). This does not even take into account that there is no consensus on which coherence relations exist, and that, consequently, we do not know which or how many relations would have to be checked before stopping (cf. Knott & Sanders 1998: 140). Let's assume, then, that we do not check all coherence relations when interpreting a coherent utterance. Do we then stop optimizing our search for a coherence relation when a certain threshold is passed? If so, what is this threshold, and how would it be described cognitively? Would this be a conscious process, where the hearer calculates when to stop, or would it happen automatically? These questions remain unanswered.¹⁷

Coherence theories, then, do not seem to be psychologically plausible – if anything, they seem to assume that discourse comprehension works in a cognitively wasteful way. Yet there is model of utterance understanding which can deal with all types of acceptable utterances (whether they are coherent or not), which does have a stopping rule, and which does deal with the frame problem. In addition, it assumes that utterance understanding is a 'fast and frugal' process in Gigerenzer & Todd's (1999) sense – it derives interpretations with a minimum of time and effort expended. This model is Sperber & Wilson's (1995²) relevance theory, and it will be discussed in more detail later on.

I have attempted to show in this chapter that discourse coherence is a descriptively inadequate and psychologically implausible way of looking at language – and, as such, is

¹⁷ Note that we have already discussed one possible answer before, when discussing whether hearers/readers looked for coherence when processing utterances. I argued that this could not be true – the hearer would first have to establish whether a given utterance is coherent before deciding whether that utterance was worth the effort of checking for coherence. The same objection applies here – a possible answer to the preceding questions could be 'well, the hearer should stop optimizing his search for a coherence relation when it is more cost-intensive to keep searching than it is to derive the possible benefit you may derive by continuing your search'. On this view, the hearer would still be caught in an unboudedly rational catch-22: he would first have to know whether the possible solution would be worth the effort before putting in the effort to derive it. There are also opportunity costs – our hearer would have to weigh the costs and benefits of continuing his search against the costs and benefits of doing something else. In turn, this leads to another infinite regress: our hearer would have to weigh whether his weighing of the costs and benefits of continuing his search against the costs and benefits of doing something else is worth the effort, and then weigh that weighing of the weighing, and so on (Gigerenzer & Todd 1999: 10-11).

a suboptimal framework for analyzing DMs.¹⁸ I have, then, demonstrated in what sense DMs cannot be connective (the coherence sense), but not what the alternative would be. The reason for this is that this alternative is bound up with a very specific approach to non-truth-conditional meaning – put differently, non-truth-conditional meaning is a crucial element in the account of DMs I am constructing.

Unfortunately, non-truth-conditionality has received far less attention than connectivity in DM research. This is probably due to the fact that most scholars working on DMs take a functional approach – they describe DMs in terms of what they do, not what they are.¹⁹ They are commonly regarded as items which function have ‘pragmatic functions’ or ‘pragmatic meaning’ and are, hence, an object of interest for pragmaticists, not semanticists (see e.g. Aijmer 2002: 2, 22-23; Lenk 1998b: 52; Matei 2010: 119; Wakker 2009: 65; Bonifazi 2008: 37; Bonifazi 2012). This assumption can be traced back to the commonly accepted dichotomy between semantics and pragmatics. On traditional philosophical accounts of meaning, semantics deals with truth conditions, and pragmatics with all the other aspects of meaning – including non-truth-conditional meaning.²⁰ However, semantics is also, of course, the study of *meaning*, that is, the Saussurean connection between *signifié* and *signifiant* (Rosales Sequeiros 2012: 21). Given that DMs are words in a Saussurean sense, they represent a major challenge for these traditional accounts – they cannot be exclusively ‘pragmatic’, as they are part of semantic competence (Escandell-Vidal et al. 2011b: xvii). The non-trivial nature of non-truth-conditional meaning is not considered to be problematic under coherence accounts of discourse and DMs – it is silently accepted that there are expressions which do not contribute to truth conditions but are part of the public lexicon (Blakemore 2002: 12).

By contrast, non-truth-conditionality has been a focus of attention for philosophical and cognitive approaches to language since at least Frege (1892). The notion of linguistically encoded non-truth-conditional meaning is tangled up with basic questions of the nature of communication, such as the distinction between explicit and implicit communication, coding and inference, and the relationship between semantics and

¹⁸ Another reason for rejecting a coherence approach which I have not yet discussed, put forward by Reboul & Moeschler (1996: 73-74), is that its basic principle (coherence) seems to be defined in a circular fashion. On a coherence approach, coherence is to discourse what grammaticality is to clauses – coherence is what makes discourse into discourse. At the same time, discourse is defined as a collection of coherent utterances. In other words, ‘coherence’ and ‘discourse’ are not defined independently.

¹⁹ For definitions which are explicitly functional or operational, see Aijmer (2002: 2), Risselada & Spooren (1998: 132), Schiffrin (1987: 31). For Ancient Greek, see Bonifazi (2008: 37), Wakker (2009: 65-66) and Drummen (2015: 25).

²⁰ See Gazdar’s (1979: 2) definition of pragmatics, cited in Blakemore (2002: 12): “PRAGMATICS = MEANING MINUS TRUTH CONDITIONS”; see also Escandell-Vidal et al. (2011b: xvii).

pragmatics (cf. Curcó 2004: 180). In the next paragraph, I take a look at the notion of non-truth-conditionality through the lens of The Problem of Non-Truth-Conditional Meaning outlined at the beginning of this chapter – DMs are indeed usually non-truth-conditional, but where do they fall along the semantics/pragmatics divide? And what implications does this have for their function and meaning? I attempt to provide an answer to these questions in the following paragraphs, but first, I present in more detail the problems associated with the traditional account, under which semantics and truth conditions overlap.

2.2 The Problem of Non-Truth-Conditional Meaning

*KRIEGER: Okay, uploading GPS coordinate – wait a
second.*

LANA: Damn it! We don't have a second!

ARCHER: Lana, I'm sure we have one second.

--- FX's Archer, Season 1 Episode 8 ('The Rock')

From a traditional semantic point of view, it is not clear why non-truth-conditional linguistic meaning exists. As Iten (2005: 5-6) points out, traditional Davidsonian semantics assumes that people use language to say things about the world – “an utterance can be said to be about the state of affairs in the world that has to hold for the utterance to be true in that world” (id.: 6).²¹ Non-truth-conditional linguistic items (such as DMs) throw a wrench into this conception of semantics – they are words, but are not used to say something which can be adjudged as true or false. This means that semantics cannot be about truth conditions *and* conventional meaning – if it is about truth conditions, it would exclude non-truth-conditional items; if it is about conventional meaning, it would have to drop its exclusive focus on truth-conditional meaning (Blakemore 2002: 47). The first option would exclude DMs from semantics, but this seems strange. The meaning encoded by non-truth-conditional expressions is “part of semantic competence” – that is, it is arbitrary and needs to be learned (id.: 26). In order to salvage a truth-conditional conception of semantics, a special type of meaning has been proposed – DMs (and linguistically encoded non-truth-conditional meaning in general) do indeed belong to the domain of semantics, but they encode ‘pragmatic’, i.e., non-truth-conditional, meaning (Blakemore 2004: 237; De Klerk 2005: 1185). An example

²¹ See also Higginbotham (1986) and the discussion in Carston (2002a: 51-56).

of this compromise is Fraser's (1999) class of 'pragmatic markers': non-truth-conditional meaning can enter semantics as 'markers' – that is, as a discrete notion which does not contribute to the truth-conditional content of the utterance (Blakemore 2004: 223). As such, the notion of a 'pragmatic marker' is based on the truth-conditional versus non-truth-conditional distinction.

This means that the notion of a pragmatic marker (or, more generally, the notion that DMs do not contribute to truth-conditional content) is still subject to the concerns raised for traditional accounts of semantics. One of the most glaring problems is that the semantic component of grammar, on its own, does not lead to propositions – it produces a schematic, subpropositional (and hence non-truth-evaluable) blueprint of a proposition (Blakemore 2002: 28). This is known as the 'linguistic underdeterminacy thesis':

"What is meant by this is that the linguistic semantics of the utterance, that is, the meaning encoded in the linguistic expressions | used, the relatively stable meanings in a linguistic system, meanings which are widely shared across a community of users of the system, underdetermines the proposition expressed" (Carston 2002a: 19-20; see also Huang 2007: 212-213).

Let's look at an example to bring out this point:

(20) When are we going back to the sea?²²

This has been said a couple times to me by my girlfriend. What she actually means to communicate is the following:

(20') When are we going back to the chalet which my parents own and where we can stay, which lies close to the North Sea in De Haan?

That is to say, my girlfriend means to ask when we are going back to the chalet mentioned in (20'). She does not mean to ask when we are going to travel on the sea; or when we are going back to the shoreline to look ponderingly across the horizon; or when we are going to swim in the sea; or when we are going back to the Mediterranean; or when we humans are returning to our original organic compound form which evolved in the Earth's seas. I need to take her utterance in a much more restricted sense: she is asking when we are going back to her parents' chalet, which is close to the North

²² Translated from Dutch 'Wanneer gaan we terug naar zee?'. The English is somewhat awkward, but I hope it brings my point across.

Sea. We cannot see the sea from this chalet, so ‘going back to the sea’ should be taken non-literally – ‘the sea’ should be restricted to ‘the chalet which is located in a town which is close to the North Sea’ (or an approximation thereof). In this way, (20) is non-truth-evaluable if I am not able to develop it into (20’) – my answer would be aimed at answering the question in (20’), not the one in (20). If I misunderstood the question as being (20’), or if the question was stated in a context which would lead me to interpret it as (20’), my answer would change:

(20’’) When are we going back to the beach in Tétouan, which we have visited before?

The answer to (20’) might be ‘In a couple of weeks’, while the answer to (20’’) might be ‘Never’. Both (20’) and (20’’) are developments of (20), but only one is the development which my girlfriend aimed at. Truth conditions apply to a fully determined proposition established in context (such as (20’) or (20’’)), not to the semantic representation in (20).

The upshot is that the compromise which distinguishes between semantic and pragmatic meaning (where one is truth-conditional and the other is non-truth-conditional) hasn’t really solved anything. ‘Semantic’ meaning, like ‘pragmatic meaning’, is non-truth-conditional – it requires contextual input to yield a fully truth-evaluable proposition. Put differently, ‘semantic’ meaning is pragmatic as well.

Let’s take another example:

(21) A: So who’s coming to the party tonight?

B: Everyone’s coming.

B of course does not mean to say that every person of the 6+ billion in the world will come to the party. He will most likely mean to say something to the effect of ‘everyone who got an invite will come’, or ‘everyone whom both we and the hosts know, will come’. Note that there is nothing in the semantics of B’s answer which points to either of these interpretations – the interpretation is derived pragmatically. Note also that, again, truth conditions are applied to the developed proposition. For example, it would be infelicitous for A to say, when the party has finished:

(22) A: #You were wrong in saying that everybody was coming. The prime minister of Fiji didn’t come.

This would probably elicit a confused reaction from B – his aim was not to communicate that every person in the world was coming, but a certain subset of those people. However, (22’) would be an appropriate response when the party has finished:

(22') A: You were wrong in saying that everybody was coming. Bob and Sarah weren't there.

In this case, Bob and Sarah, for instance, are part of a group of people who are friends with both the hosts on the one hand and A and B on the other. As such, A assumed that B meant that 'everybody' referred to 'everyone both we and the hosts know' – this is a plausible interpretation of B's words in (21), and, as a result, (22') does not seem as strange a reaction as (22) is (see Hall (2009) for further discussion of examples like this).

A different example is discussed by Stanley Fish on the *Huffington Post* website (2015). It has to do with *King vs. Burwell*, the decision by the U.S. Supreme Court on the legal status of parts of President Obama's Affordable Care Act. One of the most contentious parts of the bill centered around the following clause:

(23) [...] the monthly premiums for such month for 1 or more qualified health plans offered in the individual market within a State which cover the taxpayer, the taxpayer's spouse, or any dependent (as defined in section 152) of the taxpayer and which were enrolled in through an Exchange established by the State under 1311 [1] of the Patient Protection and Affordable Care Act.

The underlined part of (23) is what matters here – in particular, the ambiguous notion of 'the State'. The Court opinion held that 'State' could refer both to the different states (Texas, Wyoming, New Hampshire, and so on) and to the (federal) state – i.e., that the federal state was well within its rights to set up health care exchanges. In his dissent, Justice Scalia contended that this was not the case – 'State' in (23) could refer only to the different states, and not the federal state. Fish (2015) points out that Justice Roberts argued that "the words of a statute must be read in their context and with a view to their place in the overall regulatory scheme", and that this left only one interpretation – the one espoused by the Court. In other words, context (that is, pragmatics) is necessary in order to establish the speaker-intended interpretation here. This means that the truth or falsity (in this case, the lawfulness or illegality) of (23) can only be determined once the intended interpretation of 'State' has been pinned down. If it is interpreted as referring to both the states and the federal state, the federal Affordable Care Act exchanges are legal; if it is interpreted as referring exclusively to the states, the federal Affordable Care Act exchanges would be illegal. Before making this judgment, however, we need pragmatics – we need to supplement the semantic

content of the words in (23) by looking at the wider context of the ‘regulatory scheme’, as Justice Roberts put it.²³

In all three examples above, context (and hence, pragmatics) is necessary to develop the semantic representation into a truth-evaluable proposition. Semantics does not overlap with truth-conditionality – it provides a subpropositional blueprint of utterances which leads to a truth-evaluable proposition only through the mediation of context.²⁴ As such, pragmatics provides input to the development of truth-conditional propositions as well – semantic parsing radically underdetermines what a speaker means to say. Coupled with the problem of non-truth-conditional meaning (which should belong squarely in semantics as linguistically encoded meaning proper), the linguistic underdeterminacy thesis ensures that the entire semantics/truth-conditionality versus pragmatics/non-truth-conditionality distinction collapses. As a result, the distinction between semantic meaning and the ‘pragmatic’ meaning which would be encoded by e.g. DMs fails as well – all meaning is pragmatic in the sense that is context-sensitive and, hence, subject to pragmatic input. More pressingly, the linguistic underdeterminacy thesis and the existence of non-truth-conditional meaning combine to force us to reconsider the role of semantics and pragmatics in communication.

In the following paragraphs, I provide the background for a semantics which does not overlap with truth-conditionality. This semantics can deal with both truth-conditional and non-truth-conditional meaning, as well as the underdeterminacy inherent in natural language. This alternative, radically pragmatic conception of semantics will allow me to treat DMs in a framework which does not assume that coherence exists; which is psychologically plausible; and which can deal with context and both truth-conditional and non-truth-conditional meaning in a systematic and cognitively realistic way. On this cognitive view, DMs like *δέ*, *γάρ* and *οὐν* are not distinguished as a class due to their connective and non-truth-conditional properties, but due to the fact that they encode so-called procedural meaning. This will be the framework of relevance theory, and it will offer a solution to the Three Problems outlined above. To understand where relevance theory (and its solution) comes from, it is necessary to start with the work of Paul Grice, which forms the background for the relevance-theoretic approach to semantics. As we will see, Grice set the stage for much of contemporary pragmatic theory, especially in his emphasis on the ubiquity of underdeterminacy and the importance of intentionality to communication – as well as non-truth-conditional meaning, which I will discuss later on.

²³ See Azuelos-Atias (2016) for more on the link between pragmatics and legal interpretation.

²⁴ I will discuss other examples of the gap between semantic representations and full-blown, truth-evaluable propositions below (see especially (31) and (32)).

2.3 Towards a solution for the Three Problems

In this paragraph, I aim to present a framework which (a) offers a solution to the Problem of Unfounded Coherence (§2.3.1), and (b) offers a serious (that is, philosophically founded and cognitively grounded) approach to non-truth-conditional meaning, as well as a solution to the Problem of Connectivity (§2.3.2). The aim is to build a more stable foundation on which to build an account of DMs – I will argue that the group of items to which δέ, γάρ and οὐν belong semantically, should not be described in terms of coherence, connectivity or non-truth-conditionality at all, but that a more psychologically realistic account of how these items contribute to discourse, will lead to a better understanding of their meaning. As such, I will be arguing against earlier approaches to δέ, γάρ and οὐν, which all assume that they are part of a class of linguistic items which should be functionally distinguished on the basis of their connectivity, optionality and non-truth-conditionality (i.e., DMs). While δέ, γάρ and οὐν are optional in the sense that they do not lead to syntactic or semantic well-formedness, they should be distinguished on the basis of the specific type of semantic information they encode. Put differently, they are part of a group of linguistic items which are not necessarily connective or non-truth-conditional, but which are characterized by a special type of meaning (known as procedural meaning). It should be underlined that this group of linguistic items does not overlap with the group of linguistic items which would be subsumed under the ‘DM’ label, but I retain the DM concept all the same, so as to not muddle the terminological field any further.

2.3.1 The Problem of Unfounded Coherence: on linguistic underdeterminacy and intentionality

‘I’m the wrong person to ask’, he says. But what’s the intention? Is he fed up with the subject? Deflecting guilt over the marriage? --- MIKE SHINER (Edward Norton) to RIGGAN THOMSON (Michael Keaton), in Alejandro Iñárritu’s Birdman (2014).

The linguistic underdeterminacy thesis is one of the most widely accepted assumptions underlying pragmatic research today (see the references in Huang 2007: 5-6). The ways in which this thesis has been implemented, however, have been quite divergent. Different theorists carve out different roles for semantics and pragmatics respectively – depending on the underlying assumptions, some theorists assume that semantics has a large role to play in determining what the speaker means to say, while others assume that a far larger gap lies between what the speaker says and what she means to communicate. At its core, this is, then, a discussion about (semantic) decoding

and (pragmatic) inference – some assume the former is primary, while others believe it is the latter which dominates the process of utterance interpretation.

The starting point for a discussion about the semantics/pragmatics distinction (and how to draw it) is Paul Grice (1989). Grice's work on saying and meaning has, as stated, influenced all subsequent research on pragmatics, and much of the research in this field of study today can be traced to his views on communication (Neale 1992: 509; Allott 2010: 216; Carston 2002a: 94).

2.3.1.1 Grice on 'what is said' and conversational implicatures

Grice's most enduring contribution to the philosophy of language is his distinction between 'what is said' and 'what is implied'. Those propositions which the speaker means to communicate but which are not part of what she explicitly says, are what Grice calls 'conversational implicatures'. However, what interests us here, for the moment, is Grice's 'what is said', and how it is related to the semantic content of the utterance. 'What is said' can be taken in one of two ways: either it refers to "what is asserted by the speaker", or to the (meaning of the) words uttered (Allott 2010: 197). Given the nature of linguistic underdeterminacy, both cannot be true at the same time – either 'what is said' includes pragmatic intrusions, or it is strictly semantic but subpropositional (see Blakemore 2002: 47). Grice recognized that 'what is said' had to somehow go beyond the words uttered (what is known as 'sentence meaning'²⁵) – i.e., that the words uttered, on their own, could not make up a full, truth-evaluable proposition. As a result, he argued that hearers have to go beyond sentence meaning in order to get at 'what is said', that is, what the speaker meant to communicate directly. The hearer has to be able to assign reference to referring expressions, disambiguate ambiguous constituents, and determine the time and location of the utterance before an utterance can be adjudged to be true or false (Clark 2013: 77; Neale 1992: 520).²⁶ According to Grice, then, 'what is said' has to be pragmatically established, but is still very close to the conventional meaning of the words uttered, i.e., to sentence meaning (Clark 2013: 167).

Grice's conversational implicatures, on the other hand, are almost fully pragmatic in nature. Although they do follow from "the conventional meaning of the words used" (i.e., 'what is said'), they are also dependent on "context" and rely on the hearer's knowledge and application of what Grice calls the 'Cooperative Principle' (Grice 1989: 31):

²⁵ See Recanati (2004: 6) for the notion of 'sentence meaning'.

²⁶ Technically, an utterance cannot be true or false (only propositions can) – what I should say here is 'before an utterance can be developed into a proposition and hence be adjudged to be true or false'.

“Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.” (Grice 1989: 26)

Grice assumes that conversation is a rational exchange, where both parties observe the Communicative Principle. He argues that communicators also assume that hearers will assume that the speaker will observe the Cooperative Principle. Based on the Cooperative Principle, Grice proposes four maxims – norms which we are expected to follow in conversation. Briefly, these maxims assume that speakers will be “informative but not too informative” (Maxim of Quantity); truthful and “based on adequate evidence” (Maxim of Quality); relevant (Maxim of Relation); and “to speak in an appropriate manner” (Maxim of Manner) (Clark 2013: 57). The Maxim of Manner leads the speaker to “avoid obscurity of expression”, “ambiguity”, and leads her to “avoid unnecessary prolixity” and “be orderly” (Grice 1989: 27).

The combination of ‘what is said’, context, and the Cooperative Principle and the accompanying maxims, leads to the generation of implicatures (Neale 1992: 525; Clark 2013: 59). As such, implicatures can never be semantically encoded in an utterance (unless they are conventional, cf. *infra*) (Blakemore 2002: 74). According to Grice (1989: 30), implicatures arise in one of four ways – either the maxims are being followed; there is a “clash” between more than one maxim; the speaker ‘flouts’ a maxim; or the speaker ‘opts out’ of the Cooperative Principle. The last one will not concern us here – the other three are described in detail by Grice (1989: 32-33).

(24) A: I am out of petrol.

B: There is a garage round the corner. (from Grice 1989: 32)

In this case, B would not be acting in accordance with the Cooperative Principle if he did not mean to imply that the garage around the corner will have petrol available. In other words, the only way in which A will take B to be acting in accordance with the Cooperative Principle, is if he generates the implicature that the garage will have petrol available. If this implicature is not generated, the maxims would be violated (Clark 2013: 59).

(25) contains an instance of ‘clashing’ maxims:

(25) [A is planning with B an itinerary for a holiday in France. Both know that A wants to see his friend C:]

A: Where does C live?

B: Somewhere in the South of France. (from Grice 1989: 32)

B's answer would seem to violate the Maxim of Quantity – A obviously wants to know more than the general vicinity where C lives if he is to plan his trip right. However, B “is aware that to be more informative would be to say something that infringed the [...] maxim of Quality”, as he does not have “adequate evidence” for a more detailed description (Grice 1989: 33). The implicature here is, then, that B has no exact idea of where C lives.

The speaker can also ‘flout’ a maxim:

(26) [In a recommendation letter for a “philosophy job”:] “Mr. X’s command of English is excellent, and his attendance at tutorials has been regular.” (Grice 1989: 33).

In this case, there is no clash between maxims, but there is a clear violation of the maxim of Quantity: the person to whom the letter is directed, obviously wants to know more than what the writer informs him of in (26). Grice states that the writer of (26) “must, therefore, be wishing to impart information that he is reluctant to write down”; in this case, his belief that Mr. X “is no good at philosophy” (ibid.). The hearer, in assuming that the writer of (26) is observing the Cooperative Principle, is “led to the conclusion that” the writer “is trying to convey something else, something more relevant to the purposes at hand” (Neale 1992: 525). In cases like (26), Grice (1989: 33) argues that the Cooperative Principle operates at the level of what is implied, and not ‘what is said’ – Neale (1992: 525) states that “the primary message” in (26) is to be found in the implicature, and that ‘what is said’ doesn’t really matter for the purposes of what the writer is trying to communicate. Its only purpose is to lead the hearer to the conversational implicature that Mr. X would not be a good candidate for the philosophy job.

In sum, Grice assumes that ‘what is said’ is very close to the conventional meaning of the words uttered. Pragmatic inference plays a limited role in establishing ‘what is said’, and is much more active in deriving ‘what is implied’ – the generation of conversational implicatures depends on hearers’ ability to recognize how speakers follow, diverge from and flout the conversational maxims. Note that the conversational maxims are irrelevant in determining ‘what is said’ – it is highly likely that Grice meant for disambiguation and reference assignment to be automatic or ‘mechanical’ processes (Hall 2013: 100).

Grice’s contribution to the field of pragmatics lies in a different direction as well. As stated, his recognition of the crucial role of pragmatic inference in communication is still very much at the center of pragmatics today; however, his focus on speaker intentions has been at least equally influential (Allott 2010: 9). It is important to underline, as Neale (1992: 528) points out, that Grice’s model entails that speakers intend for their audience to derive both ‘what is said’ and ‘what is implied’ – implications which are not speaker-intended are not part of ‘what is implied’, and

cannot be termed ‘implicatures’ (which are always speaker-intended). Conversely, hearers attempt to recover the speaker’s intention in order to infer both ‘what is said’ and ‘what is implied’. In (24), for instance, the speaker wants the hearer to recognize her intention to inform him that there is a garage around the corner which sells petrol; the hearer, on the other hand, aims to find out what it is that the speaker is trying to inform him of (Sperber & Wilson 1995²: 22-23; Neale 1992: 515). In (26), the speaker intends for her interlocutor to recognize her intention to inform him that she thinks that Mr. X is not a good candidate for the philosophy job. In other words, an utterance is a (very specific) clue to the speaker’s intentions – based on the utterance, the hearer is able to ‘read the speaker’s mind’ and infer that her intention was, for example, to inform him about the petrol at the gas station around the corner (Allott 2010: 126). The speaker, for her part, uses her specific utterance to make clear this specific intention – she intends for the hearer to recognize her intention by means of her specific utterance.²⁷ I will go into more detail on this point later on.

There are several fundamental problems with Grice’s account of both ‘what is said’ and conversational implicatures, and, more specifically, of where to draw the line between those two. In particular, many theorists have pointed to the fact that a much larger role should be carved out for pragmatics in establishing ‘what is said’ – that there is, in more technical terms, much more pragmatic intrusion in Grice’s ‘what is said’ (Huang 2007: 189).

2.3.1.2 Post-Griceanism: redrawing the semantics/pragmatics division

Grice’s shadow on the current landscape of pragmatics looms so large that contemporary theorists are usually divided among neo-Griceans and post-Griceans. While neo-Griceans accept the Gricean view that utterance interpretation is constrained by maxim-like tenets, post-Griceans argue for pragmatic principles which are not maxim-like but, rather, cognitively founded (Clark 2014: 303). Put simply, neo-Griceans assume that Grice is right about most things, while post-Griceans assume that Grice is wrong about more things. Examples of neo-Griceans include Levinson (1983, 2000) and Horn (1989, 2007); post-Gricean are Recanati (2004) and relevance theorists (see Sperber & Wilson (1995²) and Carston (2002a) in particular). On the whole, post-Griceans are more interested in the psychological mechanisms behind humans’ pragmatic abilities – they argue that neo-Gricean models “lack psychological and empirical plausibility”

²⁷ Additionally, Grice’s idea that the very act of communicating creates certain expectations (in his case, that the maxims will be followed, or at least exploited in some sense) has had a profound influence on relevance theory in particular, as we will see (Sperber & Wilson 1995²: 37).

(Scott-Phillips 2015: 171).²⁸ For reasons of space, I will discuss only two post-Gricean theories – one relatively succinctly (Recanati’s model), one in great detail (relevance theory). I am interested in post-Gricean theories because my aim is to give an empirically founded, psychologically plausible and independently evidenced theory of how we interpret utterances, and, in particular, how DMs contribute to that process. Neo-Gricean theories are, as stated, more interested in the (normative) cooperative principles behind utterance understanding. For my purpose, then, Recanati’s model and relevance theory are most suitable; of these two, however, relevance theory seems to be more robustly supported by theoretical, experimental and evolutionary evidence, as we will see shortly.

Recanati

François Recanati rejects what he terms Grice’s minimalism – on Grice’s view, ‘what is said’ diverges only minimally from the conventional meaning of the words uttered (2004: 7)²⁹; Recanati, by contrast, argues that ‘what is said’ requires much more pragmatic input. He postulates two types of relevant ‘pragmatic processes’. These processes are psychological: they are activated in the hearer’s mind during utterance interpretation. Primary pragmatic processes develop sentence meaning into ‘what is said’ (i.e., are pre-propositional), while secondary pragmatic processes lead to the derivation of what Grice called conversational implicatures (they are post-propositional). Primary pragmatic processes include ‘saturation’, ‘free enrichment’ and ‘semantic transfer’.³⁰ Saturation, first, includes Grice’s reference assignment, but is construed much more broadly – it encompasses every situation where “a slot, position or variable” in the sentence is contextually ‘filled in’ (Huang 2007: 220). “Semantic values” are ascribed to “the constituents of the sentence whose interpretation is context-dependent” (Recanati 2004: 7). Examples include possessives, where ‘I enjoyed reading John’s book’ has to be developed into, for example, ‘I enjoyed reading the book [written by] John’ or ‘I enjoyed reading the book John [owns]’ in order for it to be true or false; it also includes those examples where “free variable” spots are present, as in ‘John was late’, which has to be contextually filled in to, for example ‘John was late [for the seminar]’ or ‘John was late [for the football game]’ in order for it to be true or false (Huang 2007: 221).

²⁸ There are problems with post-Gricean approaches too – see the references in footnote 60 *infra* for various critiques of relevance theory, for instance.

²⁹ A view which is shared by neo-Griceans – see Carston (2002a: 96-97) for discussion.

³⁰ Grice’s disambiguation is also part of the primary pragmatic processes (Recanati 2004: 27).

‘Free enrichment’, on the other hand, does not entail the presence of a constituent which needs to be ‘saturated’ in the sense outlined above. It is hence ‘free’ in that it is not linguistically mandated as saturation is, but entirely pragmatic in nature (ibid.). A glum ‘I’ve got nothing to wear’, for instance, needs to be developed into ‘I’ve got nothing [suitable for a wedding] to wear’, for instance, before it can be judged to be true or false (Hall 2009: 102). Note that ‘nothing’ in this example does not need to be saturated as the possessive or ‘late’ were in the previous examples.

In the case of ‘semantic transfer’, finally, a concept is not saturated nor enriched, but “a different concept altogether, bearing a systematic relation to” the concept encoded is constructed (Recanati 2004: 26). ‘Shakespeare is on the top shelf’, for instance, needs to be interpreted as ‘[The collected works of] Shakespeare are on the top shelf’ (or an approximation) (Huang 2007: 222).

The developments induced by saturation, free enrichment and semantic transfer would all be considered part of ‘what is implied’ on a Gricean (and neo-Gricean) account. Recanati argues that they are part of ‘what is said’ on a psychological basis. He states that the results of the primary pragmatic processes outlined here are part of ‘what is said’, as native speakers would feel them to be an undeniable part of ‘what is said’ if they were asked to give their intuitive views (Recanati 2004: 20-21). Put differently, our pre-theoretical intuitions must be preserved as much as possible in determining whether something is part of ‘what is said’ (see Recanati 1993). On a Gricean account, (27’) would be ‘what is said’; according to Recanati, (27’’) would be ‘what is said’:

(27) I enjoyed reading John’s book.

(27’) I enjoyed reading John’s book, either the book written by John or the book owned by John or the book about John.

(27’’) I enjoyed reading the book written by John.

Recanati assumes that most competent speakers would take (27’’) to be ‘what is said’. On his account, then, pragmatics gains ground in determining ‘what is said’ *vis-à-vis* the Gricean account – Recanati’s ‘what is said’ is much more pragmatically enriched.³¹

Recanati’s account of secondary pragmatic processes assumes that they operate on the fully propositional utterance (‘what is said’), and lead to conversational implicatures. Whereas primary pragmatic processes are blind and associative, secondary pragmatic processes are properly (i.e., non-demonstratively) inferential.

³¹ Levinson (2000) calls this ‘semantic retreat’, but, as Blakemore (2002: 30-31) points out, semantics still has a crucial role to play, even in a framework where pragmatics has a large contribution to make in determining a truth-evaluable proposition.

Primary pragmatic processes are automatic in that “considerations of accessibility alone” drive the recovery of ‘what is said’ (Mazzarella 2014: 72); implicatures, on the other hand, need to attain some standard of “pragmatic acceptability” (id.: 77). Crucially, only secondary pragmatic processes, then, entail that the hearer takes speaker intentions into account. Primary pragmatic processes are not representational in this sense, and are, in that sense, Gricean – recall that on the Gricean model, disambiguation and reference assignment were also ‘mechanical’ processes in that they were not induced by the Cooperative Principle or the maxims (Carston 2002b: 142). According to Recanati, the derivation of implicatures is a ‘reflective’ process – it requires conscious reflection on speaker intentions. Recanati explicitly subscribes to Grice’s theory of conversational implicature here (2004: 17), and argues that hearers are conscious not only of both (the pragmatically enriched) ‘what is said’ and ‘what is implied’, but also of the “inferential connection between them” – contrast this with sentence meaning and ‘what is said’, where the hearer, according to Recanati, is not aware of the gap or the connection between them, but only “of the output of the primary [pragmatic] processes involved” (2004: 23).

To recap, Recanati’s model carves out a much larger role than Grice for pragmatics in enriching sentence meaning into ‘what is said’. He distinguishes between primary pragmatic processes on the one hand – which lead from subpropositional sentence meaning to the propositional ‘what is said’ and are associative –, and secondary pragmatic processes – which lead from ‘what is said’ to ‘what is implied’ and are properly inferential. He also assumes that hearers are aware of the inferential connection between ‘what is said’ and ‘what is implied’, but not of the connection between sentence meaning and ‘what is said’.

Relevance theory

I mean, I truly believe there exists some combination of words. There must exist certain words in a certain specific order that can explain all of this, but with her I just can't ever seem to find them.
 --- WALTER WHITE (Bryan Cranston), in AMC’s *Breaking Bad*, Season 3 Episode 10 (‘Fly’)

Relevance theory (RT) makes assumptions which are broadly similar to Recanati’s model. As with Recanati, the RT point of departure is psychological rather than philosophical. RT assumes that ‘what is said’ is very different from what is semantically encoded – in fact, it introduces new terminology in order to explicitly separate itself from the Gricean framework. The outcome of the semantic decoding process is called the ‘logical form’ – this is an incomplete, subpropositional representation, computed entirely through “linguistic decoding processes” (Carston 2002a: 9). Contextually, it is developed into the ‘explicature’ in roughly the same way as Recanati’s ‘what is said’ is

derived – not only through reference assignment and disambiguation, but also through the other types of pragmatic enrichment outlined above (Wilson & Sperber 2004: 615; see Carston (2002a: 21-28) and (2010) for discussion). Implicatures are also derived in much the same way as they are under Recanati's account: they are generated by using the explicature as one of the premises (and combining it with contextual assumptions which are available to the hearer) (Hall 2009: 112). Explicatures, on the other hand, are developed 'locally', as they are on Recanati's account – free enrichment and saturation, for instance, modify "subparts of the linguistic logical form". Implicatures, by contrast, are derived 'globally' – they take the entire explicature as a premise in the inferential process (Carston & Hall 2012: 69). In both cases, inferential processes play a role – in the case of explicatures, to develop the logical form; in the case of implicatures, to derive the implicitly communicated assumptions using the explicature as a premise (Blakemore 2002: 74).

There do not seem to be many differences between RT and Recanati's account (see Huang 2007: 241). However, RT rejects the assumption that there is a difference between the way in which explicatures (Recanati's 'what is said') are derived on the one hand, and implicatures on the other. Recanati argues that the first process is associative and subdoxastic, and the latter properly inferential and conscious; RT argues that both processes are subpersonal (that is, unavailable to consciousness) but properly inferential (Sperber & Wilson 2002/2012: 267; Carston 2010: 267-268). Recanati also assumes that his primary and secondary pragmatic processes occur sequentially – first, 'what is said' is derived, and only then can implicatures be generated. RT, on the other hand, assumes that there is a 'mutual adjustment process' here – the explicature, of course, determines which implicatures are derived, but the derivation of implicatures also enables the hearer to adjust his explicature (Carston 2002b: 142-143).³² So-called 'bridging implicatures', for instance, necessarily precede the derivation of the (full) explicature:

(28) a. Jane has a new house. The front door is blue. (from Wilson & Matsui 2000/2012: 187)

In (28a), 'the front door' is obviously part of the 'new house' which Jane has bought. However, this is an implicature of the utterance:

(28) b. Jane's new house has a front door.

³² Carston (2007) notes that Recanati's more recent work accepts the 'unitary' account which RT provides with the mutual adjustment process.

(28b) is trivial, of course, but it is still an implicature which has to be derived in order to determine the full explicature for (28a):

(28') a. Jane has a new house. The front door [of that new house] is blue.

In (28a'), free enrichment has taken place, but it has taken place under the guidance of the bridging implicature in (28b). A bridging implicature, as such,

“is a contextual assumption, warranted by the explicit content of previous discourse, needed to introduce an intended referent which has not itself been explicitly mentioned.” (Matsui 2000: 199)

(28), then, provides evidence for the assumption that the derivation of explicatures and implicatures cannot be strictly sequential – implicatures and explicatures can be derived in parallel (Carston 2002b: 143; also Carston 2007).³³

The most important difference between Recanati and RT, however, is the guiding principle underlying the derivation of ‘what is said’/explicatures and implicatures. According to Recanati, ‘what is said’ is derived through considerations of accessibility, and implicatures through conscious reflection on speaker intentions. According to RT, both explicatures and implicatures are derived through the same inferential process, and both are guided by the same heuristic. As such, Recanati’s pragmatics is binary, while RT’s is unitary (Carston 2002b: 141-143). RT assumes that all pragmatic processes are handled by a single “pragmatic comprehension system”, guided by the following heuristic:

(29) a. Follow a path of least effort in computing cognitive effects: Test interpretive hypotheses (disambiguations, reference resolutions, implicatures, etc.) in order of accessibility.

b. Stop when your expectations of relevance are satisfied (or abandoned). (Wilson & Sperber 2004: 613)

(29) is known as the relevance-theoretic comprehension heuristic, and it underlies all aspects of utterance interpretation. It retains the core of Recanati’s accessibility principle, but matches it up against a stopping rule (relevance) which ensures that not just the most accessible interpretation is chosen, but the most accessible interpretation which is acceptable. RT is still very much focused on speaker intentions: the hearer has

³³ Note that this does not mean that the derivation of implicatures can be a local process – a bridging implicature takes the previous utterance as a premise.

to derive an interpretation which fits in with the communicator's abilities and preferences (Wilson & Sperber 2004: 612; Sperber & Wilson 1995²: 268-269), but he will derive the one which is most accessible (that is, least effort-intensive) given those parameters. More specifically, the hearer will accept the first interpretation which comes to mind and which satisfies his expectations of relevance. How should these expectations be understood?

On cognition, relevance and communication

Carston (2002a: 105) points out that RT is a "cognitive processing pragmatics" – that is to say, it is a theory about how people process utterances from a cognitive point of view. Yet RT is more than that – it aims to provide a cognitively grounded account of how humans process stimuli in general. At any given moment, there are several stimuli vying for your attention – much more than you can pay attention to. Sitting at my desk, I could be hearing the soft patter of rain on my attic window and the soft hum of my computer processor. Someone could be cooking a steak in the kitchen, and the smell could be wafting to my room. There could be a radio on in the background. And yet I am writing this sentence without being distracted by these other stimuli. The environment is full of information, but we have only limited time and resources available to attend to it – and hence prioritize (Simon 1997).

A core problem for human cognition, then, is how to allocate processing resources to different stimuli – evolution would have selected for cognitive systems which are able to attend to important stimuli. If a hunter was walking through the woods tens of thousands of years ago, and he saw a nice creek where he could bathe to his right and a mountain lion running straight at him on the left, he would presumably have paid attention to the most important stimulus, the mountain lion – even though that creek sure seemed nice (see Sperber & Wilson 1995²: 151-152).

This is, of course, an extreme example. Most of the time, there are several different stimuli which may be worth your immediate attention. So the question remains: how do our cognitive systems allocate processing resources to incoming stimuli? Sperber & Wilson (1995²: 260) propose the Cognitive Principle of Relevance:

(30) Human cognition tends to be geared to the maximisation of relevance.

Our auditory, perceptual and olfactory systems (to name but a few) are constantly monitoring the environment for stimuli which may be relevant. If you smell what seems to be fire, this will be very relevant to you – it will take precedence over all other stimuli, and will lead you to undertake certain behaviour (check whether something is on the stove, leave the house as quickly as possible, and so on). According to Sperber & Wilson, this is because this stimulus is very relevant. One of our highest priorities is that we want to survive; we are hardwired to understand that fire is a threat to that survival;

as such, smelling fire will be very relevant to our purposes. Even if I am, for instance, watching a very exciting part of a movie, I will be running out of the house as soon I suspect that there could be a fire hazard.

The same is true for communication. Let's say I'm having a dialogue with a friend. We're talking about how we think Arsenal doesn't stand a chance in their football game against Barcelona tonight. All of a sudden, I think I smell gas. I ask my friend 'Do you smell gas as well?' He'd answer yes or no, depending on his sensation. The point here is that I interrupt our discussion about football because I assume that the topic of a gas smell is more relevant than our conversation about football, and I assume that my interlocutor assumes that as well. The more relevant a stimulus is, the more it will attract the attention of our cognitive systems – in this case, the dangers of a gas leak are more relevant than the effects I (or we) might derive from our conversation about football (cf. Sperber & Wilson 1995²: 151-152; also the discussion in §2.1.5 *supra*).

Relevance, then, is a comparative notion: some stimuli may be very relevant, while others may be less relevant but still not irrelevant. How are humans able to differentiate between and compare stimuli in this way? 'Relevance' in RT can be defined as a balance between positive cognitive effects and processing effort (Clark 2013: 30). A 'positive cognitive effect' is "a worthwhile difference to the individual's representation of the world" (Wilson & Sperber 2004: 608) – that is, a positive cognitive effect will generally strengthen an existing assumption which the individual has available; eliminate and/or replace an existing assumption; or combine with an existing assumption to lead to a so-called contextual implication (Sperber & Wilson 1995²: 109). As Clark (2013: 103) puts it, a stimulus "is relevant if it leads to positive cognitive effects and [...] the more positive cognitive effects it has, the more relevant it is".

This is the positive part of the relevance coin. The negative part is processing effort. Processing effort is the cognitive effort expended in deriving positive cognitive effects (Carston 2002a: 44). The more processing effort required, the less relevant a stimulus becomes. As such, two stimuli which would produce the same positive cognitive effects but which do not require the same processing effort, are not equally relevant – the one which requires less processing effort is more relevant. For example, paying attention to the smell of fire will lead to the positive cognitive effect that you need to get out of the house, and, hence, need to look out for your survival, while costing very little in the way of processing effort – the smell is picked out almost automatically. Reading *The Brothers Karamazov*, on the other hand, may cost much in the way of processing effort (it's long, sometimes densely written, and it centers around many demanding and complicated themes (God, free will, rationality, etc.)), but, to me at least, it was worth it – it produced many positive cognitive effects (not only thematically in that it 'changed my views', but also aesthetically in that I found it to be beautifully written). However, if you don't find the themes to be interesting or don't appreciate the way in which it is written, you may

give up quickly – the effort you have to put into understanding what is written is not offset by corresponding positive cognitive effects (cf. MacKenzie 2002: 53).

In communication, then, the property of relevance works exactly the same as it does in non-communicative circumstances. Take the following example (from Clark 2013: 35):

(31) George has a big cat.

In the most basic sense, it costs processing effort to decode the semantic content of the words uttered, pragmatically enrich this logical form into an explicature (establish the referent of ‘George’, for instance), and derive the implicatures (for instance, that George may not be the most suitable candidate for taking care of your baby while you are gone for the evening). Processing effort depends on factors such as recency of use (for example, we have just been talking about how I used to have a cat when I was younger), perceptual salience (for example, we are seeing a big cat walking across the street), ease of retrieval from memory, and linguistic or logical complexity (the more complicated or difficult to follow an utterance is, the more processing effort it will require) (Clark 2013: 104). But processing effort is also involved when the hearer is confronted with the pragmatic enrichment required by the ambiguity of ‘big cat’. ‘Big cat’ can refer either to a big house cat, or to a tiger, leopard or lion – i.e., members of the biological family of ‘big cats’. RT assumes that the interpretation which the hearer derives, depends on considerations of relevance – in most cases, the first interpretation will be preferred as it is simply more likely. If the speaker had wanted the hearer to derive the second interpretation, it would have been better to just say ‘George has a tiger/leopard/lion’ – in the latter case, processing effort would have been decreased and ambiguity would have been avoided (id.: 35-36). The ‘big house cat’ interpretation would be more relevant here than the ‘tiger/leopard/lion’ interpretation in that it produces positive cognitive effects (for example, the contextual implication that George can’t take care of your baby, or that George likes animals) for little processing effort (the first interpretation which comes to mind would presumably be the ‘big house cat’ one). However, this is not set in stone. Let’s say I know that George has a collection of exotic animals – and you know that I know this, and I know that you know that I know this. In this context, the ‘tiger/leopard/lion’ interpretation might come to mind first; it might be judged to be relevant (i.e., produce positive cognitive effects); and, hence, it might be accepted – I might assume that you said ‘big cat’ because you’re not sure if he has a lion, tiger or leopard (but certainly one of those three). In this case, the ‘tiger/leopard/lion’ interpretation would be more accessible than the ‘big house cat’ interpretation and would be checked first to see if it produces positive cognitive effects. If it did not (for example, I might know that George likes to collect exotic animals – and the ‘tiger/leopard/lion’ interpretation would hence come to mind – but I might also assume that you do not know that), then the ‘big house cat’ interpretation would be checked. If

this would fit the context better, it would be accepted, because the first interpretation did not meet my expectations of relevance.

Consider also the following example:

(32) Kenyan lawyer offers Obama 50 cows, 70 sheep, 30 goats to marry his daughter Malia. (from *African Spotlight*, ‘Kenyan lawyer offers Obama 50 cows, 70 sheep, 30 goats to marry his daughter Malia’. 23rd of May, 2015.³⁴)

This utterance is ambiguous, as becomes obvious by looking at the user comments on the social news aggregation website Reddit.³⁵ There are (at least) three possible interpretations here: one is that the Kenyan lawyer offers President Obama the livestock so that the Kenyan lawyer can marry Obama’s daughter Malia Obama. The second is that the Kenyan lawyer offers Obama the livestock so that Obama will marry the Kenyan lawyer’s daughter, Malia. The third is that the Kenyan lawyer offers Obama the livestock so that Obama will marry his own daughter, Malia Obama. Why do we accept the first interpretation and not the second or the third one? Relevance theory assumes that we do this by searching for the speaker-intended context: the utterance in (32) would activate the assumption that the speaker is probably talking about President Obama, and that President Obama has a daughter named Malia. In addition, it would activate contextual assumptions concerning the notion of marriage – namely, the assumption that people marry outside their family. Given these assumptions, the first interpretation will be accessed first, and it would produce positive cognitive effects. The second interpretation would be possible but will probably not be activated first, as the salient contextual assumption that President Obama has a daughter Malia leads to the first interpretation. The third interpretation would only be activated if the first and second ones would somehow not be acceptable, as it does not fit in with basic assumptions about marriage. The point here is that ambiguous utterances are pragmatically enriched into an explicature based on our assumptions about the world (i.e., our contextual assumptions).

Interpretations are, then, highly context-dependent. ‘Context’, in this sense, is a “psychological construct” which contains the “set of premises” which the hearer uses to derive the interpretation of an utterance, and which is “a subset of the hearer’s assumptions about the world” (Sperber & Wilson 1995²: 15). This context may include

³⁴ Accessed via <http://africanspotlight.com/2015/05/23/kenyan-lawyer-offers-obama-50-cows-70-sheep-30-goats-to-marry-his-daughter-malia/>, on 20th of February, 2016.

³⁵ See the thread at

https://www.reddit.com/r/nottheonion/comments/37a31p/kenyan_lawyer_offers_obama_50_cows_70_sheep_30_goats_to_marry_his_daughter_malia/.

assumptions provided by the ‘physical context’, i.e., the location of the utterance; the ‘linguistic context’, i.e., the utterances which have preceded the one under consideration; and assumptions from the hearer’s general encyclopaedic knowledge (Huang 2007: 13-14; see also Ariel 1990; Blass 1990). The question, of course, is how this subset is selected from all possible contextual assumptions. In other words, we are again confronted with the frame problem (outlined *supra* in §2.1.6).

Sperber & Wilson (1995²: 141-142) assume that the process of context selection is constrained by the search for relevance, just as the derivation of explicatures and implicatures is. When processing an utterance, an initial ‘minimal context’ is given – this might encompass only the assumptions provided by previous utterances in the discourse. However, these assumptions have probably extended the context as well, due to the fact that our encyclopaedic knowledge is organized into ‘chunks’.³⁶ For example, mentioning ‘cats’ might activate assumptions about dogs, given that, for most people, these animals are tightly connected (they are sworn enemies, or two of the most popular pets, and so on). This would explain exchanges like the following:

(33) A: George has a big cat.

B: I don’t think Jane would like him. She has a golden retriever.

The implicature here, of course, is that cats and dogs don’t get along – and that cat and dog owners don’t get along either. Note that there is nothing in A’s utterance which points to dogs – however, his utterance has activated certain encyclopaedic assumptions on B’s part (namely, that cats and dogs don’t like each other), which has induced her to utter her response in (33). Crucially, B expects A to understand the implicature that Jane would not like him *because* she has a dog – in order to do so, B assumes that A will have access to the contextual assumption that, in general, cats and dogs do not like each other, and that cat and dog owners do not like each other either; also, B assumes that A knows that a golden retriever is a dog. A’s interpretation of B’s utterance, then, is based on a context which includes prior discourse (A’s own utterance) and certain contextual assumptions (about cats and dogs) which B assumed to be highly accessible for A in the context of (33). A relevance-theoretic analysis of B’s response (and, in particular, the second clause) in (33) could be spelled out, schematically, as follows (in this example, I assume that A has interpreted B’s first clause correctly already):³⁷

³⁶ See e.g. Anderson (1983) on the notion of ‘spreading activation’, under which concepts and assumptions are cognitively interconnected, and accessing one (concept/assumption) will likely activate other (concepts/assumptions) as well (cf. also Sperber & Wilson 1995²: 279).

³⁷ See Wilson & Sperber (2004: 616) and Carston (2002a: 145) for other examples.

(34) a. A assumes that B's second clause will fit in with (at least) the 'minimal context' provided by B's first clause and A's utterance in (33). This minimal context includes the assumption that George is a cat owner and that B thinks that Jane would not like George.

b. As such, A assumes that B's second clause will explain why she thinks Jane wouldn't like George. This would be most relevant at this point, given the minimal context that B thinks Jane wouldn't like George and that George is a cat owner. A assumes that there is continuity of context, i.e., that the contextual assumptions made available up until now will be relevant for deriving the speaker-intended interpretation for B's second clause.

c. B has now mentioned a golden retriever – this has activated the contextual assumption on A's part that a golden retriever is a dog. B's utterance has also added the contextual assumption that Jane is a dog owner. A's context for interpreting B's second clause now includes the assumptions that George is a cat owner, that Jane is a dog owner, and that B thinks that Jane would not like George.

d. (34c) has activated the assumption (i.e., chunk of encyclopaedic knowledge) that (i) dogs generally do not like cats, and (ii) that dog owners generally do not like cat owners – induced by the fact that cats were mentioned in the prior discourse context, and the contextual assumption that a golden retriever is a dog.

e. The expectation in (34b) is borne out: 'Jane has a golden retriever' is to be taken as an explanation for the assumption that Jane wouldn't like George. A infers this on the basis of the contextual assumption that dog owners generally do not like cat owners and standard syllogistic reasoning based on the further assumption that Jane is a dog owner and George is a cat owner. As such, the contextual assumptions discussed in (34a-d) have led A to the intended interpretation for B's second clause in (33).

f. Context does not have to be extended further: the contextual assumptions which have been brought to bear on the interpretation of B's utterance suffice to construct a relevant interpretation of B's utterance. Implicatures which may be derived by A on the basis of B's second clause could include the assumption that (B thinks that) Jane likes dog owners, or even that (B thinks that) Jane is intolerant.³⁸

Note that the activation of contextual assumptions requires processing effort. The more restricted the context required for interpreting a given utterance, the less processing effort is needed. As such, the context for interpreting an utterance is extended only incrementally – contextual assumptions are added only if they are required to construct a relevant interpretation (Maillat & Oswald 2011).

³⁸ Recall that implicatures are exclusively speaker-intended: A may think that Jane is intolerant based on B's utterance in (33), but if he did not think that B meant to communicate this, it is not an implicature.

It may seem as if B could have minimized processing effort for A by uttering something like this:

(33') A: A: George has a big cat.

B: I don't think Jane would like him. She has a golden retriever. A golden retriever is a dog. Jane is a dog owner. Dog owners do not like cat owners. George is a cat owner. Inferentially speaking, then, Jane would not like George.

A might think B had suffered a stroke if B said this, or that B was being facetious. This is because the contextual assumptions made explicit in (33') are highly accessible – our inferential mechanisms work more quickly if they can work through these highly salient assumptions than if we first have to decode the utterances in (33') and *then* reconstruct the syllogism discussed in (34). The processing effort required for interpreting B's utterance in (33') would hence be gratuitous – A can work through the syllogism implied in (33) on his own with much less processing effort.

The Cognitive Principle of Relevance in (30) is built into human cognition, and is geared

“to achieving the greatest possible [positive] cognitive effect for the smallest possible processing effort. To achieve this, individuals must focus their attention on what seems to them to be the most relevant information available.” (Sperber & Wilson 1995²: vii)

It is not yet entirely clear why we would pay attention to what people have to communicate. Why would we not simply ignore people when they are telling us a story about that one time they were in that one restaurant, or that one time their baby was eating his crayons, or that one plot of some action movie? Indeed, it would seem as if, in those cases, we could just as well not be paying attention. However, this is not due to some deficiency in communication itself, but due to the fact that the *content* of the communication does not produce (enough) positive cognitive effects to offset the processing effort we would have to put into decoding the words uttered, pragmatically enriching it, and generating the speaker-intended implicatures. Sperber & Wilson argue that communicating, by itself, sends the signal that the processing effort you put into deriving the speaker-intended interpretation will be worth it. In other words, communication itself claims the hearer's attention. This forms the basis for Sperber & Wilson's Communicative Principle of Relevance (1995²: 260):

(35) Every act of ostensive communication communicates a presumption of its own optimal relevance.

Sperber & Wilson argue that (intentional) communication is ‘ostensive’, i.e., “makes manifest an intention to make something manifest” (1995²: 49). In other words, communicative behavior, on its own, sends the information that the hearer wants to send some information.³⁹ They propose two ‘layers’ of information which are sent with every intentional utterance (id.: 58-63):

(36) a. Informative intention: the communicator aims to “modify directly [...] the cognitive environment of the audience” (id.: 58).

b. Communicative intention: the communicator aims to make clear that he has an informative intention.

The communicator not only intends to inform his audience of something, but also intends to inform his audience of this first (informative) intention.

The ‘cognitive environment’ mentioned in (36a) consists of all assumptions which are ‘manifest’ to the hearer (Clark 2013: 115). An assumption is ‘manifest’ in this sense if an individual is “is capable at that time of representing it mentally and accepting its representation as true or probably true” (Sperber & Wilson 1995²: 39). This is a matter of degree: the assumption ‘it is raining’ will be more manifest if you see it’s raining yourself than if someone tells you about it (see Clark 2013: 115). Manifest assumptions need not be represented or entertained: for example, it is manifest to most people that 9/11 is closer in time to the fall of the Berlin Wall than it is to today (24th of February, 2016), but this does not mean that you have ever actually entertained or represented this thought. However, you will be able to infer it if necessary – you have the assumptions necessary for it to be represented mentally, and hence be manifest, at any given time (id.: 116). The same holds true for perception: I may not be entertaining the assumption that the curtains in our office are purple, but it is manifest to me, and I can represent this assumption when prompted. As such, ‘what is manifest’ is a weaker notion than ‘what is known’, ‘what is assumed’, or ‘what is entertained’ (Sperber & Wilson 1995²: 40).

A communicator attempts to ‘modify’ his interlocutor’s cognitive environment – that is, he attempts to make assumptions manifest or more manifest to his interlocutor. The contextual assumptions which the hearer brings to bear on the interpretation of a given utterance are already manifest in this sense. In example (33) above, it is manifest to A, at the beginning of B’s second clause, that George has a big cat, that B thinks Jane wouldn’t

³⁹ Note that both the Cognitive and the Communicative Principles of Relevance are descriptive and not normative, as Grice’s Cooperative Principle is – they are psychological realities, not social norms (Sperber & Noveck 2004: 6; also Scott-Phillips 2015: 186-187).

like him, and also, for instance, that B knows Jane. A will probably not be *entertaining* this last assumption, but it is manifest all the same.

People share some part of their respective cognitive environments. If I and a person I have never seen or spoken to before are waiting at an airport terminal, everything which is perceptible in the physical environment will be part of our mutual cognitive environments. Moreover, it is manifest to both of us that we are sharing this cognitive environment. For example, let's say I and the person I was waiting with at the airport terminal run into each other a few days later at a restaurant at our destination. He may strike up a conversation with me and say 'That tantrum sure was something, huh?', referring to the temper tantrum of a child which occurred in our airport terminal. My interlocutor assumes that the child's temper tantrum was manifest to me – more specifically, he assumes that the temper tantrum was 'mutually manifest', that is, part of our shared cognitive environment. In order to understand my interlocutor's utterance, I now have to assume that my interlocutor assumes that the tantrum was mutually manifest. My interlocutor – on the assumption that he intends for me to understand his utterance – also has to assume that I assume that my interlocutor assumes that the tantrum was mutually manifest. And so on. This does not lead to an infinite regress – as Sperber & Wilson (1995²: 41-43) point out, at a certain point (actually quite early on), the assumption about the mutual manifestness of an *n*-order of assumptions is *not* mutually manifest. In any case, the main point here is that communication is about making assumptions (more) mutually manifest, i.e., (a more salient) part of the shared cognitive environment.⁴⁰

Let's return to the informative and communicative intentions. The informative intention is pretty straightforward. The speaker aims to make some set of assumptions mutually manifest, or more mutually manifest. In order to do this, the interlocutor will have to decode the linguistically encoded meaning of the words uttered and use his inferential abilities to derive the explicature and implicature(s). The communicative intention, on the other hand, may seem confusing at first. Why would the informative intention not suffice to infer the speaker-intended meaning? Why would we need a "higher-order intention" to make it mutually manifest that we are trying to make some set of assumptions mutually manifest (Carston 2002a: 376)? The answer is simple: without the communicative intention, there would be no communication. If I do not intend for you to recognize my intention to communicate a set of assumptions – that is, if I do not intend to make it mutually manifest that I have an informative intention, or, more straightforwardly, if I do not intend to make mutually manifest that I want to

⁴⁰ For more on the notion of mutual manifestness, see chapter 5.

make something mutually manifest –, I will simply not be communicating, according to RT.

What this entails is that, without a communicative intention, there will be none of the expectations linked to communication (which we will get into very soon). If a child is proud of her report card and places it where she knows her parents put their keys when they enter the house, she will have an informative intention to make mutually manifest that she has good grades. However, if she does not intend for her parents to recognize that she put the report card in what she assumed to be the most visible place – because she does not want them to think that she is arrogant, for instance –, there is no communicative intention, as the child does not want her parents to recognize her intention to inform them of her good grades. If the child were to walk in and show the report card to her parents, she would have a communicative intention, i.e., she would want her parents to recognize his informative intention.⁴¹ If she aims for her parents to recognize only that she has good grades, but doesn't want to give the impression that she intended for them to recognize that she has good grades, there is no communicative intention. In this sense, showing something to someone entails that you have a communicative intention (Sperber & Wilson 1995²: 49). In verbal (or gestural) communication, a communicative intention is fulfilled from the moment the hearer recognizes that intention, i.e., from the moment the hearer pays attention to the speaker's communicative act. That is to say, the very act of directing an utterance at an audience will send my communicative intention; if the audience recognizes that I am talking to them, my communicative intention will be fulfilled (Wilson 2014: 129). As Bach (2004: 470) puts it, the fulfillment of a communicative intention “consists in its recognition”.

In sum, it is only if I make mutually manifest that I have a communicative (as well as an informative) intention, that I will be communicating ostensively, as captured in the Communicative Principle of Relevance in (35) (Clark 2013: 119). ‘Ostensively’, then, refers to the fact that a speaker will have a communicative intention, i.e., “an intention to make manifest [...] an intention to inform someone of something” (Carston 2002a: 44). An ostensive act of communication depends on the audience's recognition of the communicator's intention to make manifest that she intends to inform him of something – it is ‘auto-deictic’, as Scott-Phillips (2015: 87) puts it. If the intention that I have an intention to inform you of something, is recognized (i.e., mutually manifest), very specific expectations are raised (Sperber & Wilson 1995²: 154):

⁴¹ See Clark (2013: 119) for a similar example.

“By producing an utterance, the speaker requests her hearer's attention. By requesting his attention, she suggests that her utterance is relevant enough to be worth his attention. This applies not just to speech but to all forms of ostensive communication.”

Engaging in ostensive behavior, i.e., behavior which entails a communicative intention, raises expectations of relevance.⁴² If you say something to me (or show me something), I can assume that you assume that it is worth my attention. In the report card example, the child could show her report card to her parents, or tell them about her grades – in both cases, she would be engaging in an act of ostensive behavior. She would provide direct evidence of her informative intention, while the very act of communicating would lead the hearer to derive the assumption that the child has a communicative intention, and that she intends for her audience to figure out her informative intention (i.e., to inform them about her grades) (Bach 2004: 470). On the other hand, the child could leave her report card out without a communicative intention, as outlined above. In this case, there would be no direct evidence of an informative intention. The difference is brought out clearly if we think of the parents' reaction. If the child leaves the report card lying around, the parents could notice it and congratulate her on his grades. In that case, the child could say ‘oh, you saw my report card?’, which would point either to her lack of communicative intention and informative intention (if she indeed did not want them to notice her grades), or her lack of communicative intention (if she wanted them to notice her grades but did not want them to recognize her intention that she wanted them to notice). If the child shows the report card to her parents, or tells them about her grades, the parents could still congratulate her on his grades. In that case, however, the child could not say ‘oh, you saw my report card?’ or ‘oh, you know about my grades?’ – her communicative intention is obvious (and fulfilled) from the moment she shows his report card or tells her parents about her grades. It is only in this latter scenario that the audience (in this case, the parents) could be expected to have expectations of relevance. If the communicator produces an ostensive stimulus (by showing the report card or talking about the grades contained within), it will be mutually manifest for communicator and receiver that the speaker thinks that what she has to say will be relevant to the

⁴² Note that ostensiveness is not the same as intentionality. There are several criteria which point to the intentionality of a stimulus, such as gaze alteration and persistence (that is, continuing to behave in some way until you get what you want) (see Scott-Phillips 2015: 246-247; also Liebal et al. 2014). However, these types of behavior need not be explicitly directed towards the receiver of the stimulus the sender wants to produce. In other words, ostensive communication is *overtly* intentional; or, put yet differently again, “while ostensive communication is necessarily intentional, intentional communication | need not be ostensive” (Scott-Phillips 2015: 253-254).

audience. An ostensive act of communication, then, communicates a presumption of its own relevance (Sperber & Wilson 1995²: 156; 61-64).⁴³

Note that it is only in this case that the audience will be justified in deriving implicatures. In the report card example, the child could show her report card or talk about her grades. In that case, the parents might assume that she is showing or talking about it because she wants them to reward her in some way, based on their interpretation of her behavior and the contextual assumption that children only show their report card or talk about their grades to their parents if they get something in return. This would be an implicature of the child's ostensive act. However, if there is no communicative intention, this implicature could not be derived. Regardless of whether the report card is lying around or placed strategically, without a communicative intention the parents will not be able to derive the implicature that their child wants them to give her a reward – she did not intend for them to recognize her intention of their noticing the grades in the first place (or she did not have this intention in the first place), and implicatures are always speaker-intended.⁴⁴

But we are not done. We have seen that the Communicative Principle of Relevance in (35) states that an act of ostensive communication communicates a presumption of its own *optimal* relevance. How does this work? Wilson & Sperber (2004: 612) spell out the presumption of optimal relevance in the following way:

(37) a. The ostensive stimulus is relevant enough to be worth the audience's processing effort.

b. It is the most relevant one compatible with communicator's abilities and preferences.

Clause (37a) entails that an act of ostensive communication will produce positive cognitive effects. How many depends on the processing effort – recall that 'relevance' is a comparative notion which depends on the balance between positive cognitive effects and processing effort. The more processing effort it costs to interpret an utterance, for instance, the more positive cognitive effects the audience can expect. However, if an utterance is too hard to understand (because it contains extensive jargon, or is too long, or depends on contextual assumptions which are not manifest to the audience), it will not be worth the processing effort, and it will not be (optimally) relevant. If this happens often enough, the audience will eventually stop paying attention to this

⁴³ Humans are the only species with the ability to communicate ostensively. Chimpanzees communicate, but they do not do so ostensively (Scott-Phillips 2015: 285).

⁴⁴ The parents may still *give* the child a present, of course – but this would be an action of their own accord, and not a reaction to the child's implicature.

particular speaker, as deriving interpretations is simply not worth the processing effort. Most speakers, however, will aim to minimize processing effort, and put things as succinctly as possible, limit jargon, and take the mutual cognitive environment into account. In short, clause (37a) is one of adequacy – an utterance needs to be relevant enough in terms of positive cognitive effects to be worth the processing effort (Sperber & Wilson 1995²: 164). This also means that trivial interpretations of an utterance will be rejected – they do not produce enough positive cognitive effects to be worth the processing effort (Clark 2013: 35).

Contrast this with clause (37b). For verbal communication, the speaker may have multiple ways to express what she wants to convey. Compare the different possible answers to the question ‘Would you like some cake?’ in (38):⁴⁵

(38) a. No.

b. No, thanks.

c. I have celiac disease.

d. I am suffering from an autoimmune disorder which prevents me from eating food products which contain gluten protein.

The first answer (38a) is the shortest, and hence would entail minimal processing effort – it is clear and to the point, and leaves no ambiguity. Still, the speaker may prefer (38b), which is longer but more polite – considerations of ‘face’ (in Brown & Levinson’s (1987) sense) may play a role in whether the speaker opts for (38a) or (38b) and hence whether she increases processing effort. (38c) does not give a straightforward answer – if the speaker opts for (38c), she has to assume that her interlocutor knows what celiac disease is, and that he can generate the implicature that people who suffer from celiac disease generally do not eat cake, and hence, that she does not want any cake. (38c), then, requires much more processing effort than (38a) or (38b) – additional contextual assumptions have to be brought to bear on its interpretation, and implicatures have to be derived. However, this extra processing effort might be justified if the speaker assumes that her interlocutor is interested in why she does not want cake, or if she does not want to seem rude and hence wants to provide a reason for her refusal to take a piece of cake. (38d), finally, is very similar to (38c) in its basic content, but entails yet more processing effort – it is more of a description of the disease, which seems excessive in a context where someone has only asked you if you wanted some cake. In this case, then, processing effort is not matched by corresponding positive cognitive effects – (38c) would seem preferable, if the speaker assumes that her interlocutor is aware of

⁴⁵ For another example along these lines, see Sperber et al. (1995: 49).

what celiac disease is. Even if she assumes that this is not the case, she would probably be much more likely to say something like (38e):

(38) e. I have celiac disease, so I can't eat cake.

(38e) does not seem haughty as (38d) does, and it does not contain a surfeit of jargon as (38d) does. It connects celiac disease to the speaker's rejection of the cake via 'so' – even if her interlocutor is not aware of what celiac disease is, (38e) will suffice to make it clear that there is some inferential link between celiac disease and not eating cake, and the speaker will be able to assume that this is an explanation for her rejection of the cake.

Clause (37b) entails that the speaker would pick (38a) if her preferences did not include being polite in this specific context (e.g., if she is among friends), (38b) if her preferences did include being polite, and (38c) if her preferences include informing her interlocutor about her disease. In addition, the speaker's abilities are also relevant here – speakers are not all equally competent or proficient at expressing what they mean to say, and this may also play a role in their choice of utterance. (37b), then, presumes “more than mere adequacy” (Sperber & Wilson 1995²: 157) – it assumes that speakers will be as relevant as possible, and that unnecessary processing effort will be avoided.

A hearer can presume a communicator to be optimally relevant in two senses: her utterance will produce enough positive cognitive effects to be worth the hearer's processing effort, and she will minimize processing effort as much as possible. On the part of the hearer, the presumption of optimal relevance leads to the relevance-theoretic comprehension heuristic in (29) – the hearer assumes that he can take the path of least effort in deriving the speaker-intended interpretation of an ostensive stimulus (entailed by clause (37b)), and that he can stop at the first interpretation which is relevant enough, i.e., the interpretation which produces enough positive cognitive effects to be worth the processing effort expended (clause (37a)). Ostensive communication, then, comes with a guarantee of optimal relevance in this sense.

On mindreading, modules and heuristics

CHERYL: I have an idea!
ARCHER: Okay. Wait. Does it have anything to do with
our current situation?
CHERYL: Yes.
ARCHER: Okay, what is it?
CHERYL: We are stuck in an elevator.
ARCHER: The idea, not our current situation.
CHERYL: Well, I'm not a frickin' mindreader!
--- FX's Archer, Season 6 Episode 5 ('Vision Quest')

A large part of the RT account of utterance interpretation depends on mindreading. In order to develop the explicature and derive implicatures, hearers must be able to read the speaker's intentions.⁴⁶ Let's say I'm playing a board game with my niece and nephew, who are nine and eleven years old. My mother could enter and say 'It's time'. In order to derive what she means here (that it's time *for the children to go to bed*), I have to be able to 'read her mind' in a non-trivial sense – I have to be able to read her intentions. Her intention is for me to stop playing the board game with the kids, for the children to go to bed, for the children to get a good night's sleep, and so on. If I cannot read her intentions, then her utterance might mean anything: it might be time for one of the children to take a shower, or a TV program which my mother and I both follow might be starting, or it might be time for me to leave if I want to catch my train, or my pasta may have been cooking for the required number of minutes and it may be time for me to turn off the stove. There is no way for me to know which one of these interpretations (or countless others) is meant unless I can somehow read the speaker's intentions. Mindreading precedes successful communication – as we have seen, an utterance is only a pointer to the speaker's intentions. In other words, hearers derive the speaker's intentions based on the utterance she produced; hence, mindreading is “a crucial prerequisite” for ostensive communication (Scott-Phillips 2015: 205).

Mindreading capabilities – that is, “the ability humans have to infer other's mental states from observation of their actions” (Allott 2010: 15; Scott-Phillips 2015: 193-195) – are independent of language: very young children and animals with no linguistic abilities have been observed mindreading (Apperly 2011: 111). This has sometimes been interpreted as evidence for the assumption that mindreading is a separate module in the human brain. ‘Modules’ in this sense are “functionally dedicated computers” (in a metaphorical sense; see Tooby & Cosmides (1995: xiii), cited in Samuels (2000: 20)) which are part of humans' cognitive architecture. There is discussion as to whether modules are genetically specified devices which are hardwired into our brain (Sperber 1994; 2001b: 57), or whether there are “modular phenotypes” which are constructed through interaction with external stimuli but which are not necessarily hardwired into our brain (Barrett 2006; also Barrett & Kurzban 2006; Cosmides & Tooby 1994). In this latter sense, modules are functionally (but not necessarily neurologically or genetically) specialized compartments of our brain. On either view, modules are in some sense the result of Darwinian selection, i.e., they are evolutionary adaptations to humans' environments a long time ago (Samuels 2000: 20-21).

⁴⁶ As Carston (2002a: 44) notes, utterance interpretation requires a metarepresentation of someone else's intention. In fact, it requires a metarepresentation of an intention to make another intention mutually manifest – that is, a metarepresentation of the speaker's communicative intention.

On the standard view, developed most famously by Fodor (1983), humans' cognitive architecture includes both these Darwinian modules and a non-modular central processor. Fodorian modules are characterized by a number of different traits. Most important are their domain-specificity, informational encapsulation, and fast and mandatory nature – that is, they are specialized for particular stimuli; information outside their domain is unavailable to them; and they cannot be turned off and they work fast, respectively (see Huang 2007: 199; Carruthers 2006a: 4-5). Vision, for instance, is a separate module in this sense, as are all four other senses – vision can only deal with visual stimuli; information about, for instance, sound is not available to the vision system; a visual stimulus is processed quickly; and you cannot turn off your vision (see Marr 1982). The central processor, on the other hand, is non-domain-specific, informationally unencapsulated and its operation is not mandatory, nor mandatorily fast. Instead, it is concerned with “reasoning, judgment, and decision making” (Barrett & Kurzban 2006: 628). Information flows from the modules to the central processor, which applies our inferential and rational abilities to the information received (Barrett 2005: 264). As such, domain-specific visual representations are routed from our vision module to the central processor, which develops it into a non-domain-specific representation which can serve as input for further inferential processes. An example of the modularity of vision is the Müller-Lyer illusion: our vision ‘sees’ the lines in the illusion as being unequal, even when we know that the lines are, in fact, equal – that is, even when we *know* the lines to be equal, we *see* them to be unequal (Sperber 2001b). Our visual perception produces a representation which is limited in the sense that information which is relevant for its interpretation, is not brought to bear. Hence, our perception module is informationally encapsulated.

In an earlier version of RT (Sperber & Wilson 1995²: 177), linguistic decoding was adjudged to be a modular ability; this ‘language’ module dealt with semantic decoding, and sent the output of this process (the logical form, in RT terms) to the central processor.⁴⁷ The central processor, which contains our inferential and hence our pragmatic abilities, would then develop the logical form into a fully propositional explication and the derivative implicature(s). Pragmatics, then, as an ability, would be located in the Fodorian central processor (see Huang 2007: 200). On this view, mindreading, a crucial element of our pragmatic abilities, would be located in the central processor as well (Wilson 2005: 1132).

The more recent account of RT takes a different view. This updated version has developed along the lines of the ‘massive modularity hypothesis’, one of the staples of

⁴⁷ This may be obvious, but it is important to point out that this language module is not equivalent to Noam Chomsky's Universal Grammar – see Scott-Phillips (2015: 385-386) for discussion.

research on evolutionary psychology (see especially Carruthers 2006a, b; Sperber 2001b, 2005; also Pinker 1997), and has been a bone of contention in research on modularity since it was first proposed. Massive modularity is very different from Fodorian modularity – starting with its rejection of Fodor’s central processor. Kutas (2006: 292–293) points out that there is very little neurological evidence to support the existence of a Fodorian central processor, and that the alternative, “a view of the brain as a collection of large number of functionally specialized faculties”, is much more plausible (but see Huang (2007: 200) for a different view). This latter view entails the assumption that the mind as a whole is divided into different modules – that is, that no central processor exists, either neurologically or functionally. Massive modularity means *massive modularity*: modules have been proposed which would deal exclusively with folk physics, or with cheater detection, or with mindreading (Carruthers 2006a: 6).

There are two main arguments in favor of massive modularity, outlined by Carruthers (2006a). One is biological: there are instances of domain-specific damage to the human mind (losing the ability to recognize human faces, or to produce or understand language, while other systems remain intact), which would point to damaged modules. The second one is task specificity: challenges posed by different domains are so different that they would presumably require distinct learning mechanisms. For instance, calculating the correct angle and speed with which to throw a basketball to a team mate who is streaking across the court is very different from identifying cheaters. It would seem farfetched to assume that one general mechanism would be able to deal with both of these affairs, and much more besides. The second argument points to some sort of massively modular cognitive architecture; the first one points to an exclusively massively modular cognitive architecture – what Samuels (2006: 42) calls ‘strong massive modularity’: “[a]ll central systems are domain specific and/or encapsulated, and there are a great many of them”.⁴⁸

⁴⁸ Carruthers (2006a: 6–7) argues that massively modular modules are radically different from Fodorian modules. Most importantly, of course, the notion that modules produce ‘shallow outputs’ which are delivered to and developed in the central processor, cannot be maintained if there is no central processor. The output delivered by massively modular modules must, then, be fully developed and representational. Carruthers (2006a: 6) also argues that it is impossible for *all* massively modular modules to be domain-specific – the module(s) responsible for practical reasoning, for instance, cannot be domain-specific, “since in order to do its job it will have to be capable of receiving any belief, and any desire, as input”.

The massive modularity hypothesis is highly controversial, and there are many reasons to doubt, if not the hypothesis itself, at least some of the underlying assumptions; Woodward & Cowie (2004) is a good place to start here. Samuels (2006) proposes a return to the Fodorian model of modularity; Prinz (2006) rejects a modular model of the human mind outright – according to him, the human mind is modular in neither a massively modular nor a Fodorian sense.

Relevance theory currently assumes that pragmatics (that is, our ability to understand utterances in their context) is a submodule of the mindreading module in a massively modular cognitive architecture (Sperber & Wilson 2002/2012: 278). Mindreading, on this view, is a “metapsychological ability to inferentially attribute mental states or intentions to others on the basis of their behaviour” (Huang 2007: 201), or, as Wilson (2005: 1132) puts it, “a domain-specific inferential module” – that is, it is a functionally specialized modular system which can be damaged or can function suboptimally without influencing the functionality of other systems and abilities (see also Barrett & Kurzban 2006: 630).⁴⁹

On the RT account (Sperber & Wilson 2002/2012: 278), then, the relevance-theoretic comprehension heuristic in (29) would be part of an evolved submodule of the mindreading module. Ostensive stimuli would automatically activate this submodule and lead the hearer to a relevance-based process of utterance interpretation – that is, he would automatically follow the relevance-theoretic comprehension heuristic in (29). This process, of course, depends on the hearer’s ability to derive speaker intentions – utterance interpretation is all about using linguistic evidence as pointers to speaker intentions (Wilson 2014: 129).⁵⁰

⁴⁹ A couple of clarifications are in order here. First, it should be underlined that mindreading is not a cognitively effortful process, which would fit the hypothesis that it is modular (Scott-Phillips 2015: 217). Second, note that the modular approach espoused by RT does not mean that ‘language’, as a collection of all the abilities involved in producing and understanding language, is modular. As Scott-Phillips (2015: 238) notes, the “biological foundations” of language are diverse and non-unitary – it involves “speech production, speech perception, language processing, memory, imitation, and so on”. As such, our linguistic competence would certainly involve manifold modules.

Finally, Fodor assumes that mindreading is a central process, as stated – belief fixation is a central process, so the “ability to ascribe beliefs to other people” would presumably be a central process as well (Apperly 2011: 122).

⁵⁰ Carston & Powell (2005: 291-293) point out that the relevance-theoretic account does assume some differences between general mindreading and the mindreading involved in utterance understanding. For instance, while standard mindreading involves first-order metarepresentation of intentions, communication involves fourth-order intentionality: “a hearer has to recognise that the speaker intends him to believe that she intends him to believe a certain set of propositions”. Additionally, Carston & Powell claim that general mindreading involves observing the effects of a certain action (or retrieving from memory assumptions about what usually happens in case of that action), which is not a viable strategy for deriving speaker-intended meaning: you cannot first infer the intended effect of an utterance and then infer that it was the speaker’s intention to produce that effect.

Apperly (2011: 116) argues that the relevance-theoretic comprehension heuristic actually makes mindreading expendable: as hearers can follow a path of least effort in deriving interpretations of ostensive acts, this heuristic “manages to approximate to a normative account of pragmatic inferences without actually having to compute other people’s mental states at all”. But this does not seem right – it conflates Recanati’s account of primary pragmatic processes (and his notion of availability) with the RT account of explicature derivation. In fact, both explicature and implicature derivation are properly inferential in RT, and hence, do have to take

The present RT view of the cognitive organization of our pragmatic abilities ties in nicely with Gigerenzer & Todd's (1999) heuristic approach to cognition. A heuristic is a domain-specific 'rule of thumb' which allows us to deal with very specific situations quickly and with minimal expenditure of cognitive resources. An example is the gaze heuristic (Gigerenzer 2006; Allott 2008: 19-20). If we are trying to catch an object thrown, we assume that it will move in a nearly parabolic path – this is an 'environmental regularity' that we become attuned to quickly as children. As long as we are fast enough, and adjust our running speed to the path of the ball, we will be able to find out with almost exact precision where a thrown ball will end up (at least on Earth). The gaze heuristic, applied to a ball which is thrown, would be something like (39):

(39) "Fixate your gaze on the ball, start running, and adjust your speed so that the angle of gaze remains constant." (Gigerenzer 2006: 120)

The gaze heuristic will lead us to the spot where the ball ends up. Crucially, we are able to do this without much mental effort – we do not have to calculate the ball's trajectory, but are just intuitively able to derive a projected path. Heuristics are evolution's answer to computational intractability: specific environments show specific regularities, which can be exploited by our cognition to develop shortcuts, which minimize the amount of computational effort needed to deal with those regularities. They limit the need for extensive mental effort in working through options by determining clear stopping rules and, as such, can produce solutions quickly and frugally (Gigerenzer & Todd 1999: 13-14; Allott 2013: 82).

The relevance-theoretic comprehension heuristic, as its name suggests, is a heuristic in this sense as well: it is domain-specific (it only takes ostensive stimuli into account) and produces solutions (i.e., interpretations) quickly and frugally – the most accessible interpretive hypothesis is tested first to see if it yields positive cognitive effects; only if it does not, does the hearer proceed to the next most accessible interpretive hypothesis (Carston 2010: 217-218; Unger 2011: 117). As such, it has a clear stopping rule, and does not have to compare the effect-effort balance for each possible interpretive hypothesis – as stated above (§2.1.6), this would be an unboudedly rational explanation for how human cognition works. It also exploits an environmental regularity in its domain (ostensive stimuli), captured in the presumption of optimal relevance in (37) (Allott 2008: 186-187).

speaker intentions into account – utterance interpretations always have to be checked against the hearer's representation of the speaker's intentions. On the RT model, people do not just follow the path of least effort – they follow the path of least effort *which satisfies their expectations of relevance* (see Allott 2013: 84). Hence, mindreading is still very much a necessary component of utterance interpretation.

Being domain-specific and fast and frugal, heuristics harmonize with modules, which are, as we have seen, domain-specific and fast and frugal as well (Allott 2008: 21). Carruthers (2006b) argues that the massively modular and heuristics research programmes pursue a computationally tractable approach to human cognition⁵¹; Gigerenzer (2008: 23) states that his heuristics programme “implies a modular view of the mind”; and according to Carston (2010: 217-218), RT proposes an account of human cognition which is both modular and employs heuristics.

Let’s recap here. Relevance theory is a theory of human communication; more specifically, it deals with ostensive-inferential communication. It is ‘ostensive’ in the sense that it sends a communicative intention – the communicator intends to make mutually manifest that he intends to make some information mutually manifest. It is ‘inferential’ in the sense that it depends on the hearer’s pragmatic abilities – the hearer has to use the ostensive stimulus as a pointer to (or evidence for) the communicator’s intentions (Clark 2013: 97; Scott-Phillips 2015: 59). Ostensiveness (and hence pragmatics) is primary, linguistic decoding is secondary (Origgi & Sperber 2000) – that is, communication can be ostensive without being linguistic (as in the example of the child showing his report card to his parents). As Scott-Phillips (2015: 71) puts it, “linguistic communication is simply a very important special case of ostensive communication, one in which that ostensive communication is augmented by the linguistic code”.

The assumptions underlying RT apply, then, to communication in general, and to verbal communication specifically. Two principles are at the heart of RT: the Cognitive Principle of Relevance is oriented more towards the receiver of the ostensive stimulus, and states that people will try to maximize relevance – we are constantly checking the environment for relevant stimuli, and only pay attention to those which may produce some positive cognitive effect(s). The Communicative Principle of Relevance (which is more communicator-oriented) states that every ostensive stimulus sends a presumption of its own optimal relevance. The receiver will try to derive an optimally relevant interpretation (that is, the first one which produces enough positive cognitive effects to offset the processing effort required) given the sender’s preferences and abilities. The Communicative Principle, then, depends on the Cognitive Principle: the communicator of an ostensive stimulus expects the receiver to pick out his ostensive stimulus, given that the receiver is looking for relevance in his environment.

⁵¹ However, Carruthers (2006b) also argues that both envisage a different approach to the informational encapsulation which is necessary for computational tractability: the massively modular account assumes that modules *cannot* have access to much of the information available to us; the heuristics programme assumes that much of that information is not taken into account due to the fact that heuristics have stopping rules which automatically leave much of the available information out of the equation. In other words, the two are compatible in their underlying assumptions but incompatible in how they implement those assumptions.

According to the RT approach to verbal communication, the linguistic utterance radically underdetermines what the speaker means to say. The hearer, of course, has to decode the semantic content of the utterance, but this is only part of the process of deriving the speaker-intended meaning. The hearer also needs to pragmatically enrich the output of the semantic decoding (the logical form) into an explicature, which contains the assumptions the speaker wants to communicate explicitly (Sperber & Wilson 1995²: 182). The speaker also communicates assumptions implicitly; these are called the implicatures. Whereas the derivation of the explicature is a local process (that is, it consists of processes which develop parts of the logical form), the derivation of the implicature is a global process which takes the explicature as a whole as one of the premises. RT assumes that the derivation of explicatures and implicatures is a mutual adjustment process: not only do explicatures provide the basis on which implicatures are derived, but hypotheses about possible implicatures may influence the explicature as well. As such, explicatures and implicatures are derived in parallel, not sequentially.

RT can also deal with the frame problem outlined above. Recall that coherence theories assumed that the hearer has to apply some contextual assumptions in deriving the speaker-intended coherence relation. Yet there is no coherence-based framework in which this process is described – coherence theorists assume that people just know how to do select and apply contextual information to utterance interpretation (see §2.1.6). However, the frame problem is one of cognitive theory's most enduring problems: how do we know which contextual assumptions to bring to bear on a problem (in this case, utterance interpretation)? RT offers a solution: the criterion of relevance. Utterance interpretation starts from a minimal context, which consists of highly accessible assumptions: prior discourse, some encyclopaedic assumptions activated by the prior discourse, and the physical surroundings. Accessing further contextual assumptions takes processing effort, which should be offset by some positive cognitive effects (Sperber & Wilson 1995²: 142).

Under a RT account, ostensive-inferential account depends, for a large part, on mindreading. The speaker, in verbal communication, assumes that the hearer will be able to read her intentions by using utterances as pointers to these intentions; the hearer, for his part, has to be able to read these intentions. RT assumes that mindreading is a cognitive module, i.e., a domain-specific and informationally encapsulated part of the human brain which deals with intention and intention ascription. Pragmatic abilities, and the relevance-theoretic comprehension heuristic, are part of this mindreading module, and hence depend directly on its proper functioning.

Evidence for the RT assumptions

In light of the previous discussion, it should have become clear that RT is a cognitively grounded theory of utterance processing. It has a leg up on coherence approaches to utterance interpretation in that it is psychologically plausible; moreover, it does not suffer from terminological vagueness (concepts such as ‘relevance’ and ‘context’ for instance, are clearly defined); and it cuts out the middleman – only the speaker-intended contextual assumptions and linguistic evidence are needed to get at the speaker-intended meaning (cf. §2.1.1, §2.1.6).⁵² Coherence theories, on the other hand, assume that contextual assumptions, linguistic evidence and coherence (relations) are necessary. Given that we presumably want to maintain ontological parsimony, and that there is no independent evidence to corroborate the existence of coherence relations, a relevance-theoretic account (or at the very least a non-coherence account) would seem preferable (see also Unger 1996: 414).

There are other reasons to design my approach to Ancient Greek DMs around relevance theory. One is its approach to non-truth-conditional meaning, which I will get into shortly. Yet there is also a more straightforward reason: the experimental and theoretical evidence which speaks in favor of RT’s account of utterance processing. Human brains have not changed much in the period between Ancient Greek and now; if RT’s assumptions about human communication are correct (that is, backed up by scientific evidence), obviously we would want to apply its insights to artifacts of human communication (i.e., texts). There is a plethora of research which suggests that the RT framework is on the right track – I will give a brief overview of these findings in what follows.

First, there is neurological evidence to support the RT assumption that mindreading regions are activated when processing utterances (Basnakova et al. 2014: 2574); as stated, there is also neurological evidence to support the existence of functionally specialized (if not neurologically specified) modules (Kutas 2006); there is neurological evidence for the use of heuristics to the “earliest possible interpretation” in utterance interpretation as well (Van Berkum 2008: 379; see also Van Berkum (2010: 191) on the brain as a predictive machine which has contextual information available “at just the right time”). Moreover, there is experimental evidence to support the RT assumption that hearers’ intuitions about ‘what is said’ are more dependent on pragmatic enrichment than Grice suggested (Gibbs & Moise 1997; Bezuidenhout & Cutting 2002:

⁵² In some cases, as we have seen, even linguistic evidence is superfluous – communication is perfectly possible without any language, but not without mindreading and the right contextual assumptions. In the case of *utterance* processing, however, linguistic evidence is of course crucial for deriving the speaker’s intentions.

442)⁵³; there is experimental evidence for the RT account of implicature derivation (Reboul 2004)⁵⁴; there is experimental evidence that the explicature is a psychological reality (Sternau et al. 2015)⁵⁵; experimental evidence to support the Cognitive Principle of Relevance (Henderson et al. 2009, for visual perception) and the Communicative Principle of Relevance (Van der Henst & Sperber 2004 provide evidence for both); evidence to support the assumption that utterance interpretation is fundamentally pragmatic, i.e. that context and inference (and not decoding) are primary⁵⁶ (see the overview in Piantadosi et al. 2012; see also Scott-Phillips 2015: 365-367); there is experimental evidence that considerations of processing effort play a role in producing utterances (Gibbs & Bryant 2008); and there is experimental evidence that spontaneous inferencing in verbal reasoning tasks is driven by considerations of relevance (Sperber et al. 1995; Girotto et al. 2001).⁵⁷ As Scott-Phillips (2015: 190) notes, RT has also been “used to develop and test novel experimental predictions in several adjacent disciplines, for instance developmental psychology [...] and language acquisition” (see Southgate et al. 2009; Henderson et al. 2013). Another advantage RT, and post-Gricean theories in general, have over neo-Gricean theories is that they are predictive: RT provides a model for how ostensive communication works, while neo-Griceans intend to provide “post-hoc descriptions of what speakers aim for” (Scott-Phillips 2015: 190).

Most importantly, however, there is serious evidence that the principles underlying RT are evolutionarily plausible. Note that RT (and also other post-Griceans and neo-Griceans) assume that the ability to understand utterances is primarily pragmatic – ostensive communication can be used without employing conventional linguistic codes (recall the example of the child and the report card above). The same is true ontogenetically: infants can communicate ostensively before they attain linguistic competence. In fact, *mindreading* comes first – infants are able to infer mental states

⁵³ Although this, of course, is not an exclusively RT assumption; as we have seen, it is also, for instance, one of Recanati’s core assumptions. In fact, Bezuidenhout & Cutting (2002) conclude their study by (tentatively) arguing that the RT model of pragmatic processing is empirically *unlikely*.

⁵⁴ In short, other pragmatic theories assume that implicatures can be ‘triggered’ by (sequences of) lexical items; RT rejects this account.

⁵⁵ Although this should be qualified – Sternau et al. (2015: 99) also say that the logical form (in their terms, ‘bare linguistic meaning’) often has “pragmatic independent status”.

⁵⁶ Again, this is of course not an assumption which is exclusive to RT – it has been a staple of pragmatic research of all stripes for some time.

⁵⁷ In short, Sperber et al. (1995: 60) constructed a build-your-own Wason Selection Task kit. They argue that an easy-to-solve Selection Task (where *P* and *not-Q* are the correct answers) should involve a formulation “where knowing whether there are *P-and-(not-Q)* cases would have greater [positive, SZ] cognitive effects than knowing whether there are *P-and-Q* cases”. People automatically search for the most relevant interpretation, i.e., the one with the most positive cognitive effects (if processing effort is limited), and this will lead them to the correct conclusion. As such, considerations of relevance can influence performance on reasoning tasks.

before they are able to communicate in an overtly intentional way, and they are able to communicate in an overtly intentional way before they are able to communicate linguistically (Tomasello 2008; Scott-Phillips 2015: 205). The argument here is that ontogeny recapitulates phylogeny: in the history of the development of humankind, mindreading developed first; ostensive communication could develop only when mindreading had developed; and linguistic communication (i.e., ostensive communication using conventional codes) developed last. In the rest of this paragraph, I will sketch how this may have worked from an evolutionary point of view, following Scott-Phillips' (2015) account.

According to Scott-Phillips (2015), early *homo sapiens* started to live together in numbers which became larger over time due to many possible factors (see Johansson (2005: 208-209) for an overview). As a result, social complexity increased. These larger and more complex groups drove an evolutionary increase in brain size (the so-called 'social brain hypothesis', see e.g. Dunbar 2003) – those who could navigate these groups better, i.e., those who were more advanced in tracking and manipulating social relations, had a better chance of finding more mates. Natural selection took over from here. Larger and more complex groups required more brain power – members have to determine when they can, for instance, deceive someone else without being exiled from the group; they have to coordinate group efforts to go on a hunt; they have to track who they can trust and they you can't; who trusts this other guy here and who doesn't; what the motivation of others might be; and so on (Scott-Phillips 2015: 288).

Those who had more brain power could navigate these complex groups better; hence, they had a better chance of enhancing their group status, collecting more food, and/or finding more mates; hence, they had a better chance of replicating their genes. In this context, the ability to communicate ostensively in a rudimentary way would be a major advantage: the ability to infer and manipulate others' mental states would allow an individual to gain others' trust, coordinate efforts to seek food and shelter, organize defences against enemies, and so on (Sperber (2000) sketches a scenario in which rudimentary ostensive communication could develop). Conversely, those who could recognize that ostensive communication was taking place had a share in these advantages. The next step is, of course, "the natural selection of mechanisms designed to make ostensive communication run more smoothly and effectively", such as the incremental development of modules devoted to ostensive communication (Scott-Phillips 2015: 303). Over time, conventional codes started to emerge which enhanced ostensive communication – there is much discussion about this topic, which I will not get into (see Scott-Phillips (2015: 329-340) for an overview; also Smith (2008); Johansson (2005: 222-241)). The ultimate explanation for the evolution of ostensive

communication, then, is that it provided an advantage for navigating socially complex groups by enabling its user to read and manipulate other people's minds.⁵⁸ After its emergence, ostensive communication would have been finetuned over multiple generations through natural selection.⁵⁹

It should be clear that there is strong and diverse support for relevance theory's underpinnings. While the different pieces of evidence discussed here do not indicate, on their own, that RT provides a realistic account of utterance interpretation, together they seem to indicate that RT is the most plausible pragmatic theory available. Of course, RT may not be *the* (or even *a*) correct theory of utterance interpretation from an evolutionary (or more broadly cognitive) point of view, but it is the pragmatic model which is most consistent with what we know about the principles of evolution, cognition and language processing.⁶⁰

With the RT framework, the semantics/truth conditionality overlap is no longer a problem, a psychologically unrealistic notion of coherence is not required to derive linguistic interpretations, a cognitively realistic and well-evidenced solution to the frame problem is proposed, and an evolutionary plausible account of utterance interpretation is provided. In the next section, I will provide a further argument for a relevance-theoretic approach to the DMs under consideration here. Whereas the preceding paragraph dealt with RT's appeal for research on language in general, RT has also had a profound impact on how semanticists look at non-truth-conditional meaning and, as such, at the type of meaning encoded by the DMs under consideration in this dissertation.

⁵⁸ See Scott-Phillips (2015: 399-401), Scott-Phillips (2010: 595-596) and Origgi & Sperber (2000) on 'ultimate explanations'. An ultimate explanation deals with the evolutionary pressures which gave rise to a certain trait – in other words, it "explain[s] why a particular trait exists" (Scott-Phillips 2010: 595). Proximate explanations, on the other hand, explain how the functionality is achieved or implemented. Proximate explanations for the rise of ostensive communications, then, are that it could be used to enhance status, find more mates, or collect more food.

⁵⁹ For more details, see chapter 6 in Scott-Phillips (2015) and Allott (2013: 62-3); for mathematical proof of the evolutionary stability of the RT model of communication, see Scott-Phillips (2010: 601).

⁶⁰ Of course, RT is not without its critics – see e.g. Levinson (1989) and Burton-Roberts (2005); also Cummings (1998) on the (putative) logical positivism of RT; Luchjenbroers (1989) and Chiappe & Kukla (1996) on the vagueness of the RT account of context selection; Giora (1997) on relevance and coherence; Breheny (2002) on the RT account of explicature; and the open peer commentary on the *précis* of an earlier version of RT in Sperber & Wilson (1987: 710-736). Moore (2015) points to some problems with the evolutionary account sketched above; see also the different commentaries on Scott-Phillips (2015), collected at <http://cognitionandculture.net/webinars/speaking-our-minds-book-club> (accessed 1st of March 2016).

2.3.2 The Problems of Connectivity and Non-Truth-Conditional Meaning: on implicatures and procedures

The linguistic underdeterminacy thesis discussed above brings together strands of research in pragmatics which have been the subject of debate since at least Grice. These strands deal with questions such as saying and implicating, the semantics/pragmatics ‘border wars’ (Horn 2005), speaker intentions, and the modularity of cognitive systems. They are also highly relevant for our discussion of DMs and non-truth-conditional meaning. Is non-truth-conditional meaning part of explicit or implicit meaning, part of what the speaker says or (only) what she indicates, and part of semantics or pragmatics? As stated, DMs are obviously part of semantic competence, but they indicate how to interpret a given discourse segment – i.e., they are pragmatic in the sense that they seem to point to the processes which help hearers connect the semantic content of utterances without contributing to that content themselves (Blakemore 2002: 3; Carston 2002a: 3). The same awkward duality rears its head in the explicit/implicit distinction – DMs are obviously explicit elements of the discourse, but they seem to point to implicit connections between utterances.

2.3.2.1 Non-truth-conditional meaning and speech acts

This latter problem is one Grice wrestled with. He introduced the term ‘conventional implicature’ to refer to the type of non-truth-conditional meaning encoded by e.g. *but*, *so* and *moreover*. According to Grice, in an utterance such as ‘He is an Englishman, he is, therefore, brave’,

“I have certainly committed myself, by virtue of the meaning of my words, to its being the case that his being brave is a consequence of (follows from) his being an Englishman. But while I have said that | he is an Englishman, and said that he is brave, I do not want to say that I have SAID (in the favored sense) that it follows from his being an Englishman that he is brave, though I have certainly indicated, and so implicated, that this is so. I do not want to say that my utterance of this sentence would be, STRICTLY SPEAKING, false should the consequence in question fail to hold.” (Grice 1975: 44-45; small capitals in original)

As Bach (1999: 330; also Rosales Sequeiros 2012: 79) points out, *therefore* is not the best example, as it does seem to be truth-conditional – that is to say, the proposition would be false if the consequence should fail to hold. Let’s take another example:

(40) He penned that 80 years ago, *but* those comments could apply perfectly today. (from *ESPNFC.com*, ‘Do Arsenal have fewer leaders than their title rivals and does it matter?’, by Michael Cox. 1st of March 2016.⁶¹).

On Grice’s account, there would be some contrast between ‘being written 80 years ago’ and ‘being relevant today’, but this contrast would be implied rather than part of his ‘what is said’. The difference between this type of implicature and the more general conversational implicatures discussed above is that a conventional implicature depends on the presence of a specific linguistic expression (such as *but*), while conversational implicatures, according to Grice, arise from his maxims in some way (Neale 1992: 523–524). Conventional implicatures are a semantic way of introducing implicatures – in other words, Grice assumes that semantics can contribute both to ‘what is said’ and ‘what is implied’. As such, his conception of semantics “cross-cuts the saying-implicating distinction” (Sperber & Wilson 2005/2012: 8).⁶² This was his way of salvaging a truth-conditional conception of ‘what is said’: non-truth-conditional meaning can only contribute to ‘what is implied’ (Neale 1992: 521).

Grice assumes that (40) communicates two speech acts: one central (amounting to the proposition that ‘he’ (referring to a former manager of the football club Arsenal) penned a certain comment 80 years ago and that his comment could still apply today), and one ancillary (where the speaker is “indicating or suggesting” that there is a certain contrast between the two parts of the central speech act (Neale 1992: 523)). A conventional implicature, then, communicates a full proposition (see also Potts 2005: 213; Bach 1999: 332). This view is shared by Rieber (1997), whose conception of conventional implicatures is broadly Gricean, but “stronger”, as Bach (1999: 362) puts it. According to Rieber, conventional implicatures are ‘tacit performatives’ – that is, they

⁶¹ Accessed via <http://www.espnfc.com/barclays-premier-league/23/blog/post/2818906/arsenal-criticism-for-lack-of-leaders-is-missing-the-point>, on the 2nd of March, 2016.

⁶² As Bach (1999: 329–330) notes, Grice’s idea of conventional implicature finds its roots in Frege’s work. Frege (1892: 167) argues that *although* and *but* are non-truth-conditional and can hence be deleted without affecting truth conditions, but that “the light in which the clause is placed by the conjunction might then easily appear unsuitable, as if a song with a sad subject were to be sung in a lively fashion.” See also Horn (2013: 153), who states that Frege uses the verb *andeuten* to mean ‘implicate conventionally’ in a Gricean sense.

Note also that Grice’s conventional implicature is very different from Karttunen & Peters’ (1979) conception of the term – they argue that a conventional implicature is a presupposition (see also Potts 2005: 13; Bach 1999: 332). Potts’ (2005) notion of conventional implicature is again very different from both Grice’s and Karttunen & Peters’ conception. He argues that appositions, sentence adverbials (such as *unfortunately*) and expressives (such as *friggin’* in ‘My friggin’ bike tire is flat again!’) are true conventional implicatures, and hence reanalyzes Grice’s conventional implicature as well (Potts 2005: 13).

encode a second-order speech act, but a strictly performative one. For example, *but* would encode something like the following in (69) (1997: 55):

(40') He penned that 80 years and (I suggest that this contrasts) those comments could apply perfectly today.

Like Grice (and coherence theorists like Mann & Thompson – see §2.3.2.2 *infra*), Rieber assumes that conventional implicatures encode full propositions which say something about the relation between the propositions conjoined in (40').

There are several problems with both Grice's and Rieber's account, outlined fully in Bach (1999) – I will discuss only the most significant ones here. The main problem with Grice's account is that conventional implicatures are *not* part of 'what is implied'. This might seem intuitively right (as Clark (2013: 315) points out, if something is expressed explicitly, how can it be part of what is implied?), but Bach also proposes an 'IQ test' – if a linguistic element is part of an indirect quotation (IQ) where the utterance which contains them is represented, it is obviously part of what was said (see also Blakemore 2002: 53):

(40'') a. He penned that 80 years ago, *but* those comments could apply perfectly today.

b. Michael Cox said that Herbert Chapman penned that 80 years ago, *but* that those comments could apply perfectly today.

But, then, can "occur straightforwardly in indirect quotation" and hence passes Bach's IQ test (Bach 1999: 339). Even on Grice's narrow conception of 'what is said' (i.e., a conception which is not fully pragmatically enriched; see §2.3.1.1), conventional implicatures are part of 'what is said' and not 'what is implied'.

Rieber's analysis of conventional implicatures also entails that they are non-cancelable. Yet one of the crucial aspects of implicatures is that they are cancelable. Take (40) again:

(40''') He penned that 80 years ago, and those comments could apply perfectly today – although I do not want to suggest that there is a contrast between being old and being relevant today.

(40) might have given rise to the implicature that there is a contrast between being old and being relevant today – even without the conventional implicature *but*, as (40''') demonstrates. By adding the 'although'-clause, the speaker cancels that implicature. On Rieber's account, however, this would lead to a logical contradiction, as Bach (1999: 364) notes:

(40''') #He penned that 80 years ago and (I suggest that this contrasts) those comments could apply perfectly today – although I do not want to suggest that there is a contrast between being old and being relevant today.

In addition, it is not clear how the performative verb ‘suggest’ should be understood. Rieber (1997: 54) says that it means “tentatively put forward a proposition”, but there need not be anything tentative about suggesting a contrast with *but* or, for instance, a consequence with *so*. As such, “there is no unique performative with which” different conventional implicatures are “synonymous” (Bach 1999: 363). Finally, on Rieber’s account in (40’), conventional implicatures also do not pass Bach’s IQ test. As such, conventional implicatures, on Rieber’s account, are also part of (the truth-evaluable) ‘what is said’ (1999: 364).

Bach (1999: 340-341) notes that not all conventional implicatures pass the IQ test (*moreover* and *in other words*, for instance, flunk it). His response is to argue that these are not conventional implicatures, but ‘utterance modifiers’ which “are vehicles for the performance of second-order speech acts”. This analysis is compatible with Grice’s analysis, as Bach himself indicates, except that, on Bach’s account, their contribution is ‘explicitly indicated’ (and not implicated). As such, Bach places his analysis squarely in the speech-act tradition which Grice is a part of as well (Blakemore 2002: 39). Bach’s analysis of *but* is, in fact, quite Gricean on the whole: he proposes that *but* works as an operator on the conjoined propositions. As such, he assumes that someone who hears (40) will recover a proposition “with something like the concept CONTRAST as a constituent” (Blakemore 2002: 55). In other words, Grice, Rieber and Bach all assume that *but* leads the hearer to recover a full proposition.

There are several problems with Bach’s analysis. One of the most obvious ones is that his IQ test doesn’t work – Hall (2004: 218) points out that, while utterance-internal *but* indeed passes the IQ test, utterance-initial *but* flunks it (see also Iten 2005: 59); Carston (2002a: 176-177) argues that some of Bach’s ‘utterance modifiers’ do pass the IQ test. As such, the IQ test is not a productive or convincing method for determining whether a given item is part of what is said explicitly. Moreover, Iten (2005: 91-93) points out that Bach’s analysis of utterances as being able to express more than one proposition leads to problems with truth-conditionality and explicit content. Cohen’s (1971) famous scope test, according to which an element is part of the explicit content and truth-conditional if it falls under the scope of a logical operator (Carston 2003: 311-312) can only take one proposition into account. On Bach’s analysis, however, both expressions such as *but* and *so* on the one hand and ‘utterance modifiers’ on the other are truth-conditional and contribute to explicit content (1999: 328) – they point to a second-order proposition which is less important than the primary one, but which can be true or false in its own right (1999: 346-347). If there is a single proposition, it can be placed under the scope of a logical operator (*if* or *because*, for instance) – everything which falls under the scope

test is part of the proposition, while everything which falls outside of it is part of what is implied and non-truth-conditional (Iten 2005: 91; see also (20') in §1.1.3.2):

- (41) a. Peter went out although it was raining.
b. Because Peter went out although it was raining, he got wet.

Although does not fall under the scope of the logical operator *because*, and is hence non-truth-conditional:

“The assumption that Peter’s going out was unexpected, given the rain or that Peter’s going out and it raining are somehow incompatible is not understood to be part of the cause of Peter’s getting wet or conditions under which Peter will have got wet” (Iten 2005: 89)

But the notion of a multipropositional utterance breaks the scope test:

- (42) *Because Peter went out, it was raining, he got wet. (from Iten 2005: 91)

This is ungrammatical – there is no way to tell whether the propositions fall under the scope of the logical operator. In other words, the test ‘if item X falls under the scope of a logical operator, it is part of the explicit proposition’ does not work if there is more than one proposition – as Bach assumes is the case when, for example, *but* is added to a single-proposition utterance. However, as Blakemore (2002: 77) points out, this conundrum is only relevant if we assume that truth-conditionality and explicitly communicated assumptions are inextricably linked. If truth-conditionality were an “essential part” of distinguishing explicitly from implicitly communicated assumptions (as Bach does), a broken scope test would be hard to overcome. On a RT view, on the other hand, this problem does not arise, because explicit content is distinguished from implicit content not in that it is truth-conditional but in that it is derived ‘locally’, as a development of the logical form (in contrast with implicatures, which are derived ‘globally’, taking the explicature as one of the premises in the inferential process) (ibid.). This RT view is what I’ll take a look at in the next section.

2.3.2.2 Non-truth-conditional meaning and relevance theory: procedural meaning (or: how we can solve the Problem of Unfounded Connectivity and Non-Truth-Conditional Meaning in one fell swoop)

Recall that relevance theory (and other neo-Gricean and post-Gricean theories) assume that there is a large gap between what is encoded and what RT calls the explicature. As such, pragmatic competence is necessary to go from what the speaker encodes in her utterance to what she means to communicate (both explicitly and implicitly). The hearer is able to do this through his inferential abilities, constrained by the relevance-

guided comprehension heuristic (Wilson & Sperber 1993: 9). Grice assumed that very limited pragmatic enrichment was necessary to derive a truth-evaluable proposition, but that this proposition was very close to the conventional meaning of the words uttered, i.e., that semantic decoding provides most of the input for a truth-evaluable proposition. The only way for Grice to maintain a truth-conditional semantics was to banish non-truth-conditional meaning to the realm of implicatures – if *but*, for instance, were to contribute to ‘what is said’, then ‘what is said’ would have to be at least partly described in terms of non-truth-conditional meaning (Iten 2005: 53-54). As we have seen, however, *but* is in fact part of ‘what is said’ – not only because it passes the IQ test, but because of their status in a Gricean framework. If conventional implicatures are indeed conventional, they are derived through linguistic decoding, and hence rely on an arbitrary connection between *signifiant* and *signifié* (Rosales Sequeiros 2012: 65-66). As such, they cannot be implicatures – implicatures are derived through pragmatic principles (on a Gricean account, the Cooperative Principle and the maxims which follow from it) and are hence calculable. ‘Conventional implicatures’, then, simply cannot be implicatures.

As such, non-truth-conditional meaning ensures that approaches (such as Grice’s) which conflate conventional meaning (semantics proper) and truth conditions collapse. Non-truth-conditional meaning is, *pace* Grice, part of ‘what is said’, and hence, an object of study not for pragmatics, but for semantics (Rosales Sequeiros 2012: 66). For relevance theory (and other post-Gricean pragmatic theories), this is, of course, no problem: RT assumes that widespread pragmatic enrichment is necessary to derive a truth-evaluable proposition. The output of linguistic decoding processes (the logical form) serves as input for inferential (that is, pragmatic) processes which enrich it; the output of those processes leads to a truth-evaluable proposition. As such, there is no direct link between semantics and truth conditions. RT argues that the object of interest for semantics is not whether meaning is truth-conditional or not, but what kind of information is encoded by different words from a cognitive point of view (Blakemore 2002: 81).

This is where we get into questions of how the human brain works. We have already discussed the notion of modularity, but these questions are, in a way, even more complex – they deal with how we think in the most basic sense. RT has embraced the computational representational theory of mind (see Fodor 1990, cited in Iten (2005: 70)), according to which humans mentally represent concepts as ‘words’ which form ‘sentences’ in a language of thought (so-called ‘Mentalese’).⁶³ ‘Concepts’ in this sense are “atomic mental representations” which can be manipulated through computational

⁶³ Hagoort (2015) rejects this “propositional view on mental imagery”.

rules – computational rules can operate on single concepts, or on conceptual representations which already combine multiple concepts (Iten 2005: 70; Rouchota 1998: 32). On the RT view, words can encode information about concepts, but also about the computational rules which the hearer should employ in manipulating these concepts (Wilson & Sperber 1993: 2). The RT view of semantics is radically cognitive, and distinguishes the conventional meanings of words not according to whether they encode truth-conditional or non-truth-conditional meaning, but according to whether they contribute to the decoding process (as conceptual representations) or to the inferential processes which operate on those conceptual representations (as computational rules) (Blakemore 2002: 78).

Most words, of course, encode representational information – these are conceptual items. As Iten (2005: 71) puts it, they are “the building blocks of the logical form”, that is, the ‘raw’ material which has to be developed into a fully propositional explicature. These include words such as *car*, *eat*, *short* and *violently*. Some words, however, encode information about how to manipulate these conceptual representations – they present semantic constraints, in Blakemore’s (1987) sense, on the derivation of explicatures and implicatures by guiding “pragmatic processes which are essential in deriving the intended interpretation” (Carston 2016: 159; Bezuidenhout 2004: 2-3). These are procedural items.⁶⁴ Originally (see Blakemore 1987) procedural meaning was taken to be a cognitively-oriented synonym of non-truth-conditional meaning, and it was applied exclusively to DMs such as *but* and *so* (Blakemore 2002: 4). Additionally, Blakemore (1987) assumed that procedural items only constrained the derivation of implicatures. This initial construal of procedurality can be understood as flowing directly from Blakemore’s aim back then: providing a cognitively founded reanalysis of Gricean conventional implicatures (Blakemore 2002: 79).

Let’s take our earlier example of *but* again:

(40) He penned that 80 years ago, *but* those comments could apply perfectly today.

According to Blakemore (1987, 1989), *but* does not encode a higher-order speech act, or a proposition with CONTRAST as a constituent. Blakemore argues that, instead, *but* encodes a constraint on the derivation of a contextual implicature: on the basis of the first clause (‘He penned that 80 years ago’), the expectation (i.e., implicature) might arise that what was penned, is not relevant anymore. The clause introduced by *but* would then negate that implication, and, as such, introduce a denial of an expectation

⁶⁴ The conceptual-procedural distinction has also been sketched in terms of a distinction between translational and non-translational encoding (see Wharton 2001; Blakemore 2001b).

raised in the previous clause (see also Blakemore 2002: 95).⁶⁵ In this way, *but* would encode a procedure (a denial of expectation) which operates on contextual implications. Different DMs would encode different procedures:

(43) a. Peter's not stupid; so he can find his own way home.

b. Peter's not stupid; after all, he can find his own way home. (from Wilson & Sperber 1993: 11)

As Wilson & Sperber (ibid.) point out, *so* and *after all* would activate different procedures here. In (43a), *so* indicates that the first clause will provide support for the conclusion in the second clause; in (43b), *after all* indicates that the second clause will provide support for the conclusion in the first clause.

Both of Blakemore's (1987) assumptions (that procedural meaning is non-truth-conditional, and that procedural meaning encodes constraints on the derivation of implicatures) have now been rejected in favor of a broader view of procedural meaning. Wilson & Sperber (1993) demonstrated that procedural meaning need not be non-truth-conditional, and that conceptual meaning need not be truth-conditional – in other words, they showed that the conceptual/procedural distinction in semantics was not just a reimagining of the truth-conditional/non-truth-conditional distinction. Illocutionary adverbials such as *confidentially* and *frankly*, for instance, are non-truth-conditional but conceptual (Wilson & Sperber 1993: 17-19).⁶⁶ Within the RT framework, they contribute to so-called 'higher-level explicatures' – explicatures can be embedded under higher-level descriptions (such as speech act or propositional attitude descriptions) (Wilson & Sperber 1993: 5). Let's say I say the following to my mother:

(44) I got rear-ended on the highway tonight.

This can be embedded into a higher-level explicature as follows:

(44') Samuel says that he got rear-ended on the highway tonight.

But let's say I said (45):

⁶⁵ Blakemore (1989: 35) emphasizes that a sentence like (40) does not communicate two separate propositions, but a single conjoined proposition. The first clause provides contextual assumptions which affect "the context for the interpretation of the second" in a way which is constrained by *but* – that is, the first clause raises an implication which provides a context for *but* to operate on.

⁶⁶ See Ifantidou (2001: 103-110) on the non-truth-conditionality of these adverbials – in short, they fail Cohen's (1971) scope test.

(45) Unfortunately, I got rear-ended on the highway tonight.

Then the higher-level explicature would go as follows:

(45') Samuel regards it as unfortunate that he got rear-ended on the highway tonight (see Ifantidou 2001: 153).

In this case, the adverbial *unfortunately* encodes the information that I regard the proposition ('I got rear-ended on the highway tonight') as unfortunate. It is not part of the proposition, and it is non-truth-conditional, but it is conceptual, for reasons we will discuss shortly (Ifantidou (2001: 113-115) and Wilson & Sperber (1993: 17-19); see also Zakowski (2014b) for Ancient Greek ἡ πού as a constraint on higher-level explicatures in Ancient Greek).⁶⁷

On the other hand, certain linguistic items are procedural yet truth-conditional. Pronouns (Wilson & Sperber 1993: 20) are one example here – the personal pronoun 'I', for instance, only points to a certain 'search space' (as Wilson & Sperber (1993) put it) in which a specific referent has to be located. It guides comprehension, but does not encode information about its specific referent (Carston 2016: 159; see Wilson & Sperber (1993: 20) for discussion). The same is true for demonstratives (Scott 2013; Zakowski 2014c) – they are procedural and non-truth-conditional as well.⁶⁸ Note that, on this view, a pronoun such as 'I' would encode a constraint on the explicature – reference is resolved as part of the derivation of explicatures (Wilson & Sperber 1993: 21). As such, Blakemore's (1987) second assumption, that procedurality deals only with implicatures, cannot be true either.

Today, the notion of procedural meaning has been extended even further. Interjections (*ugh*, *oops*), prosody and even unambiguously conceptual items themselves have been analysed as encoding (at least some) procedural meaning (see Carston 2016: 159; 161-165 for discussion). I will limit myself here to discussing DMs, of which many have been analyzed as carrying procedural meaning (see e.g. Blakemore 2002; Iten 2005). As stated in the introductory paragraph to §2.3, it should be underlined that not

⁶⁷ But see Fraser (2006b) for an alternative view – he argues that illocutionary adverbials encode both conceptual and procedural meaning.

⁶⁸ De Saussure (2011: 65) notes that a pronoun such as 'she' would encode both conceptual and procedural information: it would encode a procedure such as "find the appropriate female person", which includes the concept 'female person'. As such, "the procedural information" would probably take "the conceptual information as a parameter". This is a thorny issue, which is related to the question of how we should conceptualize procedural meaning. I get into this problem later on, but a discussion of the procedurality of pronouns (such as it is) awaits further research.

all DMs are automatically procedural – ἤ που, for instance, is probably conceptual (Zakowski 2014b). It is important to keep in mind that I use ‘DM’ here to refer to the subset of DMs which are procedural (I’ll return to this point at the end of this section).

Blakemore (2002) is a fundamental reanalysis of Blakemore (1987) and, as such, of the procedural meaning which DMs can encode – on this analysis, they do not (only) encode constraints on implicatures, but can be used more broadly. DMs can also, for instance, point the hearer to the contextual assumptions which are necessary for deriving the speaker-intended interpretation. These contextual assumptions can be relevant for the recovery of the explicature or the implicature, but the crucial point is that the speaker assumes that they will not be readily available unless the hearer is guided towards them by the addition of a DM (Rouchota 1998: 41). This view is now broadly accepted within RT semantics (see Jucker (1993) and Innes (2010) on *well*; Curcó (2004) on Spanish *siempre*; Schourup (2011) on *now*). DMs can also be used to indicate that a communicated assumption is mutually manifest (see Hansen (1997) on French *donc*; also Blass (2000); Lay Vivien (2006)), or that it is not (Vaskó & Fretheim (1997) on Norwegian *altså*); that it is a reformulation (e.g. Sasamoto (2008) on Japanese *dakara*, Dedaic (2010) on Croatian *dakle*, or Unger (2012) on Kurdish *ka*); that it is an attributive metarepresentation (i.e., a representation of a thought or utterance which is attributed to someone else; see e.g. Blass (1989, 1990) on Sissala *rɛ*); and so on. In all of these cases, these DMs have been analyzed as carrying procedural meaning. I’ll give three examples here:

(46) A: ‘That man speaks extremely good English.’

B: ‘*Well*, he is American.’ (from Jucker 1993: 442)

(47) *Donc*, pour revenir à ce disait la dame précédemment, il est difficile d’envisager une solution à brève échéance. (from Hansen 1997: 164; cited from Zénone 1981: 118)

‘*So*, to return to what the lady said before, it’s difficult to see a solution in the short term.’

(48) Mary: ‘Whose gig did you go to last night?’

Peter: ‘Black Rebel Motorcycle Club.’

Mary: ‘Who?’

Peter: ‘*Dakara*, the band we saw at Leeds Festival last year.’ (from Sasamoto 2008: 128)

In (46), Jucker (1993: 442) argues that B uses ‘well’ to “renegotiate” the contextual assumptions A and B are using. A might assume that ‘that man’'s command of English is surprising or remarkable; this does not square with B’s assumptions about the man, and this induces the use of *well* – the contextual assumptions available to B are different from those available to A, and ‘well’ indicates that B assumes that a shift in context is necessary (id.: 451). In (47), ‘*donc*’, according to Hansen (1997: 170), encodes the

procedure ‘assume that the information which follows is mutually manifest’ – as the speaker here points back explicitly to what has already been mentioned, she uses ‘donc’ to indicate that what she is about to say, is already mutually manifest. In (48), finally, ‘dakara’ encodes the procedure ‘take the following information to be a faithful representation of the previous assumption’ (see Sasamoto 2008: 152) – in other words, it introduces a reformulation, or a representation of another assumption. In this case, Mary doesn’t know who Peter is referring to, so Peter activates some contextual assumptions related to the Black Rebel Motorcycle Club in the hopes that this will help Mary identify the band. The band is reformulated as ‘the band we saw at Leeds Festival last year’.

Procedural meaning, then, encodes instructions on how to manipulate conceptual representations in the inferential processes associated with utterance interpretation (see Wilson 2016: 10). The question now becomes, of course, (a) how we should conceptualize procedural meaning as something distinct from conceptual meaning; and (b) how we can test whether a given linguistic item is conceptual or procedural. The two questions are related, but I will deal with them in turn to keep things clear.

How does procedural meaning differ from conceptual meaning in how it is stored and organized cognitively?

If the conceptual/procedural distinction is a cognitive one (i.e., it is relevant for how we conceptualize and store semantic information), and procedural meaning differs from conceptual meaning, then there should be a clear difference in how we represent and use the rules encoded by procedural meaning cognitively (Wilson 2011: 9). Bezuidenhout (2004: 7) suggests that our mental lexicon has a “proprietary code for representing semantic information” (possibly *Mentalese*). This lexicon contains both procedural and conceptual entries – the former activate the rules or instructions associated with procedural meaning, while the latter activate concepts. However, Bezuidenhout argues (2004: 8, 16), if procedural entries are written in *Mentalese*, then they will just consist of conceptual items – we would need procedural rules on how to manipulate these conceptual items, and these procedural rules would also presumably be written in *Mentalese*. As such, we would be confronted with an infinite regress. At some point, the procedural rules would have to be written in a non-representational (or non-conceptual way). Bezuidenhout (2004: 9) argues that procedural rules should be regarded as ‘dispositional’, non-representational rules. On this view, conceptual and procedural meaning would not be distinguished in how they are encoded semantically, but in “how such knowledge is embodied” – put differently, conceptual meaning would be “embodied as mental representations”, while procedures would be “embodied as causal dispositions, as ways in which the system acts on representations” (ibid.). As Wilson (2016: 10) puts it, Bezuidenhout’s procedures would be “embodied in the causal architecture of the language production and comprehension system”, and would be part

of our system of linguistic performance (that is, pragmatic knowledge) instead of linguistic competence. *But*, for instance, would be a word in our mental lexicon; if it is activated, however, it would not trigger a mental representation, but a causal disposition to operate on conceptual representations (Bezuidenhout 2004: 17). Procedural items, then, are part of our mental lexicon; the rules they trigger, on the other hand, are not – they are pragmatic.

Curcó (2011; see also Wilson 2016) pushes back against Bezuidenhout's conception of procedural meaning. For one, dispositions are conditional, that is, context-sensitive:

“a standard way of approaching the notion of disposition is to assert that an object *O* is disposed to give response *r* to stimulus *s* if an [sic] only if were *O* to undergo stimulus *s*, it would give response *r*.” (Curcó 2011: 39)

Curcó gives the example of solubility: salt dissolves if it is put into water. Hence, solubility is a conditional dispositional property. Procedures, on the other hand, are ‘rigid’, as we will see in more detail later – encyclopaedic knowledge and contextual assumptions do not affect the meaning and function of a procedure as they do for conceptual items (Escandell-Vidal et al. 2011b; Curcó 2011: 39-40). As such, they do not depend on external conditions. Moreover, it is not clear how the often very specific procedures activated by procedural items can be squared with the general dispositions which are part of pragmatic processing (Curcó 2011: 41-42). For instance, a procedure which would mark a proposition as being mutually manifest (see (47) *supra*) is highly specific; would the procedure activated by *donc* get a separate place in a dispositional system? How many dispositions would we then have to postulate – that is, how could we attain a descriptively adequate conception of our dispositional system?

Curcó proposes a different conception of the conceptual/procedural distinction. It contains dispositional rules, as Bezuidenhout's (2004) analysis does, but they are not mapped directly to procedural items – instead, Curcó assumes that procedural items belong to the domain of semantics proper (2011: 47). According to her, both conceptual and procedural meaning are representational, but procedural meaning is ‘bracketed’. A first dispositional rule, “hardwired into the representational [i.e., semantic, SZ] system”, prevents procedural meaning from being ‘unbracketed’. A second dispositional rule allows only the semantic system to have access to the procedural meaning and read it. This would explain why procedural meaning is not sensitive to context – our pragmatic abilities cannot interfere with it (2011: 43-44). In this way, procedural meaning is still properly semantic: it is “knowledge of a certain rule to operate on certain conceptual representations”, and, as such, entirely distinct from linguistic performance (or pragmatic knowledge), which should be construed much more broadly as knowledge about following a path of least effort in interpreting utterances; about how to access contextual assumptions; how to enrich explicatures; and so on (2011: 47-49). Whereas

the first type of knowledge is language-dependent (the meaning of *donc*, for instance, has to be learned for French, but it might be connected to another procedural item arbitrarily in Sissala – or it might not be connected to a specific linguistic item at all in certain languages), the second type is learned language-independently. In other words, while pragmatic knowledge is non-arbitrarily causally based, procedural items are as arbitrary as non-natural encoded meaning always is (2011: 49; Wilson 2011: 10).

The notion of procedurality is a relatively recent one, and there is still much work left to do here. There is not just disagreement on its cognitive construal, but also on how we can determine whether a given linguistic item is procedural or not. The two discussions are, as stated, not unrelated – if we are uncertain of how to distinguish procedural meaning, it will be difficult to assess how it works from a cognitive point of view. The following traits are characteristic of procedural meaning, but most of them are, to some extent, controversial – given that the set of procedural elements has been taken to include items as diverse as personal pronouns and interjections, it has not proved simple to put together a list of characteristics which unite them (Carston 2016: 159).

How can we distinguish procedural from conceptual meaning?

Carston (2016: 159-161) provides a list of characteristics usually associated with procedural meaning.

Non-compositionality

Procedural items are generally taken to be non-compositional. Conceptual items are compositional – they can combine with each other to form larger and more complex concepts. The concepts RED and BOOK, for instance, can combine to form the larger conceptual representation RED BOOK (Iten 2005: 77-78; Allott 2010: 35-36). The same is not true for DMs such as *but* or *so*. Note that it is possible for illocutionary adverbials – as Blakemore (2002: 84; also Ifantidou 2001: 114) points out, *frankly* can form part of a larger conceptual representation:

(49) *Speaking quite frankly*, I don't think people ever ask themselves those kind of questions. (from Blakemore 2002: 84)

Not all scholars agree that DMs are non-compositional. For instance, DMs seem to be able to combine under certain circumstances:

(50) A: Should we invite Cathy for dinner?

B: We don't have her phone number. Moreover, anyway, she has four children to take care of. (adapted from Carston 2016: 7)

(51) A: I got the tickets for the game yesterday.

B: I'm looking forward to it! I haven't been feeling well lately and I have so much stuff to do.

A: But so we're going, right?

Both examples are somewhat awkward, but they can arise under certain circumstances. In (50), *moreover* indicates that the assumption 'she has four children to take care of' should be taken to be additional support for the implicature that A and B shouldn't invite Cathy for dinner; at the same time, *anyway* indicates that the previous assumption is of lower relevance than the one which is given now – even if they had her telephone number, the second assumption would still preclude them from inviting Cathy. In (51), *but* indicates a denial of expectation of the previous utterance (if you're not feeling well and you have many things to do, you probably don't want to go to a game) and *so* indicates that the conclusion of the first assumption which B communicated (that she's looking forward to going to the game) should be that they're going to the game.⁶⁹ Relevance theorists have countered examples like (50) and (51) by pointing out that the DMs may appear together, but that they are still non-compositional – they do not combine to form a larger or more complex representation, but “apply individually” (Iten 2005: 78; Rouchota 1998: 36; Blakemore 2004: 231). In (51), for example, *but* applies to a different assumption than *so* does; in (50), *moreover* and *anyway* contribute the meaning they do if they occur on their own.⁷⁰

Bezuidenhout (2004: 6) provides a more challenging objection to the assumption that non-compositionality is constitutive of procedural meaning. According to her, *but* and *so* can be part of larger, compositional phrases:

(52) a. She is interested in our job. But, and this is a big but, we'll have to offer her much more money.

b. Photoshop allows us to digitally manipulate photographic images. So, although perhaps not obviously so, photography has become more like painting.

Bezuidenhout (ibid.) adds that she does not believe that this means that *but* and *so* are conceptual, but she does argue that it precludes non-compositionality from being one of the tests for procedurality. Additionally, pronouns are obviously compositional, as examples like 'we the people' and 'you of all people' demonstrate (Carston 2016: 7). As

⁶⁹ This example may be more felicitous in Dutch: 'Maar dus we gaan wel?'.

⁷⁰ In the following chapters, I will follow the same line of reasoning – $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ may appear with other DMs (or even alongside each other, in the case of $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ and $\delta\acute{\epsilon}$ and $\omicron\upsilon\breve{\nu}$), but this has no bearing on their meaning. In other words, I will argue for a non-compositional account.

such, non-compositionality does not, on its own, seem to provide hard evidence for the procedurality of a given linguistic item.

Introspective inaccessibility

Ordinary speakers have trouble paraphrasing procedural elements. When asked the question of what *but* and *so* mean, for instance, most speakers will provide an example of its use (Drozdowicz 2016: 1). The same problem does not arise for conceptual items: when asked to paraphrase what *tree* or *run* means, for instance, most ordinary speakers will be able to come up with some sort of paraphrase; the same is true for more abstract concepts such as *courage* or *violently* (Blakemore 2002: 82-83). Wilson & Sperber (1993: 16) explain this by arguing that procedures cannot be “brought to consciousness”, just as grammatical computations or inferential computations cannot be brought to consciousness. This would square with Curcó’s (2011) analysis above, in which a dispositional rule operates on procedural meaning and prevents it from being ‘unpacked’ (see also Potts 2007: 176-179). In addition, this would correlate with the fact that procedural items are often difficult to translate (De Saussure 2011: 64).⁷¹

Despite some reservations (see especially Drozdowicz 2016), this criterion would seem to apply to (procedural) DMs – one of the reasons why so much ink has flowed over these items is that no one is quite sure what they mean. The same is true for δέ, γάρ and οὐν – the fact that so many different uses have been postulated for these items is testament to the fact that its meaning is introspectively inaccessible, even for speakers who are as near to native competence as is possible for a dead language (see also e.g. Black (2002: 142) on the problems with translating δέ).

However, as with non-compositionality, this criterion does not seem to apply to pronouns – most speakers would not have trouble in paraphrasing ‘I’ or ‘she’, for instance (Carston 2016: 6).

Rigidity

A staple of RT lexical pragmatics is that conceptual items can be contextually modulated. This approach argues against the distinction between the standard, ‘literal’ use of a word and a non-standard, ‘figurative’ use. Instead, a word (for example, ‘assassin’) activates a certain concept (ASSASSIN). This concept has certain encyclopaedic assumptions associated with it – the concept ASSASSIN, for instance, encodes the information of ‘hired killer’; it has encyclopaedic assumptions associated

⁷¹ See Stede & Schmitz (2000) on the difficulties in translating DMs from a non-RT perspective; also (13) in §1.1.2 above, where I discussed how Stage II particle researchers (and Denniston in particular) already pointed to the difficulty in translating particles.

with it which might include the assumption that assassins are stealthy, that they are dangerous, that they act with precision and cold-blooded focus, that they often appear as antagonists in movies, and so on. The information encoded by the concept, the encyclopaedic knowledge associated with it, and the contextual assumptions available to the hearer (in his physical surroundings, from prior discourse and/or from the utterance under consideration) all combine to provide an occasion-sensitive ‘ad hoc concept’ ASSASSIN* (denoted by the asterisk), which is derived inferentially and specifically for the utterance in which it occurs (see Wilson & Carston 2006, 2007; Carston 2016: 3-4). Take (53):

(53) Playing into the wind in the third quarter, Brady went into assassin mode, completing 12 of 14 passes for 163 yards and two touchdowns as New England clawed back to within 24-21. (from ‘For Peyton Manning, this one stings,’ by Ashley Fox for ESPN.com. 25th of November, 2013.⁷²)

In the context of the utterance (a report of an American football match in which the New England Patriots came back from a large deficit to beat the Denver Broncos), assassin cannot mean ‘hired killer’. However, given the context which came before and the rest of the utterance, an ad hoc concept ASSASSIN* can be constructed: Tom Brady went in ‘assassin’ mode in the sense that he played with surgical precision and that he was cool and collected. Note that other encyclopaedic knowledge associated with ASSASSIN is not activated: the fact that they are stealthy, or that they often occur in movies, for instance, is irrelevant. The construction of ad hoc concepts is, like all aspects of utterance interpretation, guided by the relevance-theoretic comprehension heuristic and, as such, by the hearer’s search for relevance – his aim is to derive enough positive cognitive effects for as little processing effort as possible.

This type of modulation is only possible for conceptual items; procedural items are, in Escandell-Vidal et al.’s (2011b) terms, ‘rigid’. In essence, this means that procedural items are not modified by surrounding conceptual meaning or contextual assumptions (in the broadest sense); instead, contextual assumptions are modified in order to accommodate the instruction encoded by the procedural item (2011b: 86-87). Take the following example:

(54) I’m exotic fruit. But the people love peaches.⁷³

⁷² Accessed via http://espn.go.com/nfl/story/_/id/10033425/this-loss-tom-brady-really-stings-peyton-manning, on the 4th of March, 2016.

⁷³ From the original Dutch ‘Ik ben exotisch fruit. Maar de massa houdt van perziken.’ From *De Morgen* (11th of July, 2015), p. 21. Spoken by actress Halina Reijn.

This headline made me do a double-take – I always assumed that peaches were exotic fruit, but the presence of ‘but’ seems to preclude this option. As such, another interpretation needs to be accepted instead: peaches are, according to the speaker here, not part of the group of exotic fruits. As such, the procedural meaning encoded by *but* forced me into an interpretation which is at odds with my contextual assumptions about peaches.

In the same vein, procedural items cannot be used metaphorically or ironically – they may be part of an ironical utterance, but “they themselves are not the target of the ironical attitude” (Carston 2016: 7; De Saussure 2011: 63-64). Again, there are some questions about pronouns here. For example, the pronoun ‘she’ is often used (especially by men) to refer to their cars – would this not be a case of metaphorical use (id.: 7-8)?⁷⁴

Non-polysemy

Given the rigidity of procedural items, they are far less likely than conceptual items to develop new meanings. Conceptual items can become procedural through grammaticalization⁷⁵, but, once items are procedural, they are not likely to develop new procedural senses. They are impervious to contextual information or other contextual adjustments, and, as such, are far more difficult to use ‘loosely’ (i.e., more narrowly or broadly than their encoded meaning would suggest) – a key component of any process through which linguistic items develop new meanings (Carston 2016: 8).

This might not seem like a terribly convincing set of criteria. Yet it is predominantly pronouns which throw a spanner in the works – they are obviously compositional, they are obviously accessible introspectively, and they are probably non-rigid. However, it is worth considering whether they are really procedural in the same way as DMs such as *but* and *so* are, or whether they are better described as being ‘not conceptual’ (Carston 2016: 10; also Iten 2005: 79). Both Fraser (2006b) and De Saussure (2011) have argued that some items (including pronouns) may encode both conceptual and procedural meaning, for instance – presumably, this would mean that they would not conform (fully) to the criteria outlined *supra*. Again, there is much work left to do in carving out a semantic niche for procedural meaning, and in distinguishing between different types of procedurality. But the notion of linguistically encoded instructions on how to perform inferences is a powerful one, and it has, to my mind at least, led to some fine-grained,

⁷⁴ As such, *unfortunately*, as indicated *supra*, cannot be considered to be procedural – it is compositional (in the same way as *frankly* is), introspectively accessible and can be used ironically (for example, when I say ‘Unfortunately, John will not be able to join us tonight’, and we both know that we both hate John).

⁷⁵ See Nicolle (1998) for an RT approach to grammaticalization; see Heine (2013) on ‘proceduralization’ as a part of grammaticalization in general.

plausible and widely accepted analyses of different DMs. In fact, procedurality has become a staple of many approaches to DMs – not only are there many functional analyses of DMs along procedural lines (see e.g. Aijmer 2002: 11; Risselada & Spooren 1998: 131; Matei 2010: 120; Kroon 1995: 46; Fraser 1999; De Klerk 2005; Murillo 2012), but contemporary research on language change often posits that diachronic semantic change often goes hand in hand with a transition from conceptual to procedural meaning (see e.g. Heine 2013; Traugott & Dasher 2002; Bolly & Degand 2013; Hansen 2008: 67-68; Zakowski 2018). Ancient Greek linguists, especially those working on DMs, have also discovered the notion of procedurality – see *infra*, in the chapters on the different DMs under consideration. We do not have to throw out the baby with the bathwater – just because we are not entirely sure of how to draw the line between conceptual and procedural meaning, it does not follow that we should abandon the distinction completely. As we have seen, the notion of ‘discourse marker’ (or whatever term one might prefer) has been much debated (and still is), but this has not prevented it from being applied fruitfully to many different linguistic items in many different languages, across many different frameworks.

On their own, the criteria discussed here do not point to a procedural item; the more of them can be applied to an item, the more likely it is to be procedural (Clark 2013: 326). The two most important ones for Ancient Greek DMs seem to be non-compositionality and introspective inaccessibility. Rigidity is difficult to assess for a dead language – it is hard to come up with examples in which an Ancient Greek DM would ‘trump’ available contextual assumptions. Additionally, a polysemous approach seems to be part and parcel of both earlier and current analyses of the Ancient Greek DMs under consideration. It is perhaps best to follow De Saussure (2011: 67) when he suggests that procedural meaning should only be adduced when there is good evidence to do so – it is likely that conceptual expressions are far more prevalent in natural languages. In that case, the burden of evidence would lie on the side of procedurality. In my own analysis of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ which is to follow, I will show why I think a procedural analysis is the right one for each of these items.

Let me conclude my discussion of procedural meaning here with a comparison of how DMs are analyzed by Grice, Rieber, Bach, and Mann & Thompson on the one hand, and RT on the other. Despite their differences, Grice, Rieber, Bach and Mann & Thompson all agree on (at least) one thing: DMs such as *but* and *so* encode conceptual information (see Wilson & Sperber 1993: 12). For Grice and Rieber, coherence relations encode full propositions which are part of what is implied; for Bach, they encode concepts within a second-order proposition, but are part of what is said explicitly. In Mann & Thompson’s RST, they encode relational propositions – RST (see especially

Mann & Thompson 1986b) assumes that hearers derive propositions based on the coherence relation of a given utterance:⁷⁶

(55) Among the many things that separate *The Wire* from other TV dramas is the way that creator David Simon eases into a season. There are never any big setpieces or incidents to grab viewers by the lapels [...] but a confident, methodical patience in revealing up one story thread after another. (from *The A.V. Club*, ‘*The Wire*: “More With Less”’, by Scott Tobias. January 6th, 2008.⁷⁷)

In (55), according to RST, three propositions would be communicated:

(55') a. Among the many things that separate *The Wire* from other TV dramas is the way that creator David Simon eases into a season.

b. There are never any big setpieces or incidents to grab viewers by the lapels, but a confident, methodical patience in revealing up one story thread after another.

c. The proposition expressed in (37a) stands in an Elaboration relation to the proposition expressed in (37b) (see also Unger 1996: 419).

In other words, coherence relations should be expressed in terms of communicated propositions, which need to be derived by the hearer in order to understand the utterance – as such, they are labeled ‘relational propositions’ (Mann & Thompson 1986b). If they are fully propositional, then they are, of course, conceptual.

Unger (1996: 416) points out that Mann & Thompson (1986b) do not give a definitive answer as to whether relational propositions are communicated explicitly or implicitly. Yet this is an important question, with implications for the status of DMs in a coherence framework. It is difficult to see how coherence relations would be part of what the speaker explicitly communicates – in examples like (55), there are no linguistic items which would even hint at the existence of an Elaboration relation. As such, relational propositions are probably communicated implicitly (Unger 1996: 415). On that assumption, a DM which encodes relational propositions would come very close to Grice’s conventional implicatures – that is, non-truth-conditional items which encode propositions which contribute to what is implied (Huang 2007: 56).⁷⁸ Coherence theorists, then, have to deal with the same problem as Grice did: how what is said

⁷⁶ The philosopher John Locke discussed ‘particles’ as containing “the sense of a whole sentence [...] in them” (1959: 100; cited and discussed in Wierzbicka 1986: 531-532) – his approach, then, is similar to the analyses discussed here in that he also seems to regard them as encoding (or at least pointing to) full propositions.

⁷⁷ Accessed via <http://www.avclub.com/tvclub/the-wire-more-with-less-12739>, on the 18th of February, 2016.

⁷⁸ Note that Grice approaches these items from a speech-act perspective, not a coherence one.

explicitly (the DM) is part of what is implied. I have already outlined the problems associated with this assumption (§2.3.2.1).

RT, by contrast, approaches DMs differently. They are analyzed from a cognitive point of view as encoding procedural meaning, which contrasts with conceptual meaning. On this view, DMs encode constraints on the inferential processes associated with utterance interpretation. Procedurality can be implemented in different ways – procedural items can encode constraints on implicatures (for instance, *but* indicates that an implicit assumption is denied), constraints on explicatures (for example, French *donc* indicates that the communicated assumption is mutually manifest), or constraints on context selection (for instance, *now* indicates that the contextual assumptions necessary for interpreting the upcoming utterance are significantly different from the contextual assumptions which were used to interpret earlier utterances (see Schourup 2011)). Procedural items encode rules or instructions which operate on conceptual representations – they encode information about how the hearer should use his pragmatic abilities to infer the speaker-intended meaning of the utterance. As opposed to conceptual items, they are usually non-compositional, introspectively inaccessible, rigid and less likely to develop polysemous meanings.

Viewed in this way, procedural DMs are not ‘connective’ in any coherence sense – rather, they are semantic constraints on the process of utterance interpretation (Blakemore 1987). In fact, the ‘discourse marker’ label seems to be inherently ‘non-procedural’ as well – it is used to indicate how these items mark relations between discourse segments. However, since terminological confusion has already reigned supreme for the ‘discourse marker’ notion and I do not want to add to it, and since I have been using the term ‘DM’ up until now, I will keep using ‘discourse marker’ or ‘DM’ to refer to procedural constraints on relevance which have been treated as DMs (connective, optional, non-truth-conditional items) under other frameworks – although, with Blakemore (2004: 221), this “is not intended to reflect a commitment to the existence of a class of DMs at all” as it is commonly understood, it is true that procedural DMs *mark* the *discourse* in some special (i.e., non-conceptual) way.⁷⁹

The notion of procedurality has been applied to Ancient Greek DMs, although there have been some misunderstandings. Bonifazi (2008) conflates ‘procedural meaning’ with Kroon’s (1995) presentational meaning in discussing the meaning of γάρ, as she acknowledges in Bonifazi (2012). Drummen (2015: 35–39) praises the relevance-theoretic framework and its notion of procedural meaning as a fruitful avenue for research into DMs in Ancient Greek drama, but does not apply it to her actual analysis (which includes

⁷⁹ Relevance theorists usually use the term ‘(discourse) connective’ – see e.g. Pons Bordería (2008: 1413–1414); Unger (1996); Rouchota (1996); Blass (1993); Seneviratne (2005); Blakemore (1987).

discussions of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$). In fact, she aims to combine a coherence and a RT framework in her approach to Ancient Greek DMs (2015: 57); as we have seen, this is an impossible task, given the different (and irreconcilable) assumptions underlying them. Loudová's (2009a) account of Byzantine DMs is very similar – she assumes that these DMs are procedural but that they “ensure text coherence” all the same (2009a: 297).⁸⁰ Porter & O'Donnell (2007: 6) simply state that “conjunctions are procedural or functional words, and not content words”, without any further explanation of how they understand this distinction, and without any discussion of whether they think pronouns (which are at least partly procedural on a RT approach), for example, are ‘functional words’ as well. Soltic (2015: 52-53) presents DMs as being procedural yet also as marking relations within discourse; Soltic (2013) opposes ‘procedural’ to ‘lexical’ meaning. In fact, I myself have misinterpreted the notion of procedurality – I have applied it within the coherence framework of Functional Discourse Grammar (Zakowski 2016). Black (2002), who discusses $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$, approaches procedural meaning in a way which is most in line with the RT conception of the term, but even she falls into the trap of conflating procedural with non-truth-conditional meaning (2002: 52). Blass (1993; *non vidi*) and Casson (2014), who both look at $\gamma\acute{\alpha}\rho$, take a procedural approach as well; in fact, their framework is fully relevance-theoretic, and hence most in line with the basic assumptions underlying RT.

Research on Ancient Greek DMs, then, is often characterized by a pick-and-choose attitude: an interesting concept is lifted from a certain framework and applied to a different framework without any strings attached. Yet this has led to the problem outlined here: a misguided and inaccurate use of the term ‘procedurality’. The notion of procedurality is bound up with the RT view on language, and the RT view on language categorically rejects a coherence view of texts. As such, an item cannot be procedural if its function is described in terms of coherence relations (and *vice versa*). In the rest of this dissertation, I want to look at $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ and see whether they are truly procedural – that is, from the perspective of the cognitive processing pragmatics which RT is, and taking into account the assumptions underlying it.

⁸⁰ Loudová (2009a) employs Fraser's (1999) framework, which takes up Blakemore's (1987) distinction between procedural and conceptual meaning. However, Fraser is not a relevance theorist, and he seems to regard ‘procedural/conceptual words’ as quasi-synonyms of ‘function/content words’. As such, Loudová's (2009a) overly simplistic approach to procedurality finds its roots in Fraser (1999).

2.4 A new approach to Ancient Greek DMs

In Part 1 of this dissertation, I have tried to show that the current coherence approach to δέ, γάρ and οὖν cannot deal with three fundamental problems. One is that the notion of coherence does not seem to be well evidenced or easy to apply practically. The other two problems were concerned with connectivity and non-truth-conditionality. These two characteristics are widely regarded as the most interesting aspects of ‘discourse markers’ (Blakemore 2002: 1-2; 2004: 222), and are commonly considered to apply to δέ, γάρ and οὖν. However, connectivity is linked to coherence – δέ, γάρ and οὖν are seen as ‘connective’ in the sense that they indicate how the discourse segment which they mark, should be integrated into a coherent whole. If coherence has limited theoretical or practical value, however, then δέ, γάρ and οὖν cannot be ‘connective’ in any cognitively interesting sense. Non-truth-conditionality was not found to be a particularly compelling lens through which to look at these items, either – only on a semantics which takes truth-conditionality to be its defining property, will non-truth-conditionality have any real value. Relevance theory, as we have seen, has pointed out that the decoding of semantic content cannot lead to a truth-evaluable propositions, and that non-truth-conditional meaning is part of explicit content. From a cognitive point of view, (some) discourse markers were reanalyzed as carrying procedural meaning – procedural items encode rules on how to derive the explicature or the implicature, or on how to select the contextual assumptions which need to be brought to bear on the interpretation of the utterance. As such, procedural items guide the hearer down the right inferential path in the process of utterance interpretation – as a result, they decrease the processing effort involved in the derivation of positive cognitive effects.

Before proceeding to my analysis of the particular semantics of δέ, γάρ and οὖν, a word on polysemy. Many scholars who investigate DMs take either a so-called ‘polysemy’ approach (after Hansen 1998: 240-242), or a broadly monosemous approach in which different DM meanings are induced by the different contexts in which they can occur (see e.g. Kroon 1995). On the first approach, DMs have several related senses:

“rather than being homonymous and discrete, these various senses are related in an often non-predictable, but nevertheless motivated way, either in a chain-like fashion through family resemblances, or as extensions from a prototype.” (Hansen 1998: 241; see also e.g. Aijmer 2002: 22-23)

On the second approach, a ‘basic meaning’ is proposed which can be modulated across different contexts (see e.g. Fischer 2000: 269; Fraser 1999: 945-946). This second approach is not in line with RT assumptions about the rigidity of procedural meaning. In

other words, if a relevance theorist wants to propose a ‘basic meaning’ for a DM which is modulated in context, s/he would have to assume that it is conceptual (or abandon the assumption that procedural meaning is rigid). We might take a third approach and assume that $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ have a single, invariant meaning unless there is absolutely no other option (that is, if a set of instances of these DMs does not square with the proposed invariant meaning). This approach is in line with Grice’s so-called ‘Modified Occam’s Razor’ (‘Do not multiply senses beyond necessity’) – if we can construct an account with only one dictionary entry, this is to be preferred to an analysis which proposes two or more (Huang 2007: 7; Schourup 1999: 249). In other words, a unitary analysis of the meaning of lexical items is to be preferred above the polysemy approach when possible “for reasons of theoretical economy” (Schourup 2011: 2125; see also Zwicky 1985: 291; Fraser 1999: 945). The drawback to this approach is that this single meaning may be vague (see Schourup 1999: 251; De Klerk 2005: 1185); the upside is that we will be able to separate the meaning of a given DM from the context(s) in which it occurs, which many DM analyses do not do (see §2.1.4) – a tendency which Schourup (1999: 250) terms ‘contamination’:

“It occurs because DM meaning is assessed in connection with the entire meaning conveyed by an utterance in which a DM appears. Meanings conveyed by the entire utterance and assumptions accessed in assigning it an interpretation ‘leak’, as it were, into the proposed DM core.”

The unitary approach proposed here is good methodological practice – it makes few assumptions about ‘the’ meaning of DMs, and is ontologically parsimonious *per definitionem*. Unless proven otherwise (i.e., unless we come across instances which just cannot be reconciled with a single ‘core meaning’), I will assume that $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ have a single, general core meaning. This is also the approach commonly adopted in RT analyses of DMs (see e.g. Lay Vivien 2006: 150; Matsui 2002: 869; Schourup 2011: 2125).

Part 2

Applying the relevance-theoretic framework

Chapter 3

A relevance-theoretic analysis of δέ's semantics

The following three chapters deal with the meaning of δέ, γάρ and οὖν in turn. They make up Part 2 of this dissertation, which is focused squarely on developing a semantic analysis of these items from a relevance-theoretic point of view.

The structure of this first chapter, which deals with δέ, is as follows. In §3.1, I look at existing accounts of δέ's meaning; in §3.2, I provide my own account of its meaning – I discuss many examples from my corpus in relatively great detail, and hone in on some striking instances which do not seem to be in line with existing analyses. My main point will be that δέ points to contextual continuity, while at the same time indicating that the upcoming assumption will be separate from the preceding one. I also discuss whether δέ is procedural or not, and I suggest a cline of (dis)continuity, of which certain sections can be marked by δέ. In §3.3, finally, I formulate my conclusions.

3.1 Existing approaches to δέ

In the first part of this chapter, I will discuss previous approaches to δέ's function. I will devote most of this section to Bakker's (1993) analysis, which, along with Black's (2002), is the most comprehensive account available. First, however, I will briefly discuss Denniston's (1954²) and others' views.¹

¹ Both here and in the next two chapters, I do not provide an overview of Stage I approaches to the semantics of δέ, γάρ and οὖν. Most of the relevant insights from this stage have already been discussed in the first chapter, and any further discussion would lead to unnecessarily long digressions on the specifics of ancient philosophy of language, and its relation to contemporary conceptions of semantics (and pragmatics).

3.1.1 Stage II approaches to δέ: contrast, addition, change

As we have seen in the previous chapter, Denniston argues that δέ can be used either as a purely ‘additional’ particle (akin to &), or to indicate some type of contrast (see examples (9) and (10) in §1.1.2). As he puts it himself, δέ “denotes either pure connexion, ‘and’, or contrast, ‘but’, with all that lies between” (1954²: 162).² However, it is obvious that Denniston’s proposal cannot deal with all instances of δέ. At the end of the section, he adds a paragraph which deals with “apparently superfluous δέ” (1954²: 171) – these are examples which cannot be subsumed under his framework, as they cannot be described in terms of either & or contrast. One of the examples he provides is the following (1954²: 172):

(1) ἐπεὶ δὲ ταῦτα ποιήσας ὁ Ὑρκάνιος προσῆλθε, λέγει ὁ Κῦρος· Ἐγὼ δέ, ἔφη, ὦ Ὑρκάνιε, ἡδομαι αἰσθανόμενος ὅτι οὐ μόνον φιλίαν ἐπιδεικνύμενος πάρει, ἀλλὰ καὶ ξύνεσιν φαίνῃ μοι ἔχειν. (Xenophon, *Cyropaedia* IV.5.23.1-4)

[Cyrus had told a Hyrcanian messenger to ask his king to prepare his army for battle.] “And when the Hyrcanian had done so and returned, Cyrus said: “I [*de*] am delighted, Hyrcanian, to see that you not only show me your friendship by your presence, but also that you evidently possess good judgment.”” (tr. Miller (1914), with alterations)

In this case, there is no obvious contrast, and there is no addition – it is the first thing Cyrus says to the Hyrcanian messenger after he has returned. Denniston (1954²: 172) attempts to explain this δέ away by arguing that “[t]he object is no doubt to give a conversational turn to the opening (‘Well’), and to avoid formality.” It is unclear to me what this means, and even less how this could be connected to either the ‘additional’ function or the ‘contrastive’ function of δέ.³

The idea of δέ as a marker of contrast is also developed in Poythress (1984). He argues that its meaning in the Gospel of John⁴ is very close to that of ἀλλά (also usually translated as ‘but’), but that ἀλλά is used when there is a ‘global’ contrast, and that δέ functions on a lower syntactic level – it “is used between successive sentences whenever the writer wishes to indicate that two elements in the two sentences are in contrast” (1984: 321).

² See Smyth (1920: 644-646) for an approach akin to the one espoused by Denniston.

³ See footnote 40 for more on (1).

⁴ It is important to note that Denniston’s corpus consists solely of Classical texts.

However, this use, according to Poythress, is typical only for expository parts of the text. In narrative parts, δέ is used differently – here, it “introduces parenthetical information, background information, or explanatory information” (1984: 326). He gives the following example:

(2) λέγει αὐτοῖς, Λάβετε πνεῦμα ἅγιον· (23) ἂν τινων ἀφῆτε τὰς ἁμαρτίας ἀφέωνται αὐτοῖς, ἂν τινων κρατῆτε κεκράτηνται. (24) Θωμᾶς δὲ εἷς ἐκ τῶν δώδεκα, ὁ λεγόμενος Δίδυμος, οὐκ ἦν μετ’ αὐτῶν ὅτε ἦλθεν Ἰησοῦς. (*Gospel of John*, 20.22-20.24)

[Jesus appears to the apostles after his crucifixion:] “And when he had said this, he breathed on them and said to them, ‘Receive the Holy Spirit. (23) If you forgive the sins of any, they are forgiven them; if you withhold forgiveness from any, it is withheld.’ (24) Thomas [*de*], one of the Twelve, called the Twin, was not with them when Jesus came. (tr. English Standard Version)

As Poythress (*ibid.*) explains it, δέ here marks “an essential bit of information, necessary to the understanding of the events to come, but not itself an event in the main line of narrative development.” However, it is not obvious why this should be the case – chapter 24 marks the beginning of another episode, where Jesus appears to Thomas and invites him to touch his wounds. It is difficult to see how the utterance marked by δέ is ‘not an event in the main line of narrative development’ if it introduces Thomas as the topic of this next episode in the story, i.e., the story of doubting Thomas. In a related point, Poythress also does not expand on how an ‘essential bit of information’ can be distinguished from ‘an event in the main line of narrative development’. It would seem to be more economical to regard this example as an example of ‘additional’ δέ, where it introduces a new episode in the story of Jesus’ resurrection.

There are other Stage II approaches which are broadly in line with Denniston’s views on δέ, but which straddle the line with the coherence approaches espoused in Stage III research. Levinsohn (1987), for instance, employs pre-theoretical concepts which are more fully developed in Stage III DM research (and the coherence theories which they endorse) – according to him, δέ “introduces the next development in the story”, marking off its own ‘development unit’ (Levinsohn’s term for what amounts roughly to a discourse segment) *vis-à-vis* the previous one “without specifying” the “exact relationship” between the two (1987: 85). In Stage III terms, this amounts to arguing that δέ marks off discourse segments without indicating which coherence relation holds

between the δέ utterance⁵ and the preceding one (cf. also Bonifazi 2008: 46). Levinsohn provides some possible implementations of this general function, most of them described in terms of a ‘change’ – δέ can mark a change in temporal or spatial setting, a “change in the cast of active participants” or a “switch back to the story line of the narrative, following a background comment” (Levinsohn 1987: 90). Notice that there is no mention of ‘addition’ or ‘contrast’ here, but that δέ’s function is described in terms of boundaries between units. This way of looking at δέ’s function is entirely in line with Stage III approaches to its meaning – more specifically, it is germane to Bakker’s proposal.⁶

Larsen’s (2001) approach to δέ in the New Testament is similar to Levinsohn’s. He argues that δέ is “an adversative particle” which “signals change”, for instance by signaling “a change of participants” or a “change from background to event-line” (or vice versa). Martín López’s (1993) account also fits Levinsohn’s mould. He distinguishes between three different uses for δέ: it can be used to indicate a shift in participants, or to establish “una nueva fase” in the development of the narrative or the argumentation, or to interrupt the main line of the discourse to introduce parenthetical or otherwise additional information (1993: 230).

(3) Ἐπειδὴ δὲ οἱ τε Ἀθηναίων τύραννοι καὶ οἱ ἐκ τῆς ἄλλης Ἑλλάδος ἐπὶ πολὺ καὶ πρὶν τυραννευθείσης οἱ πλεῖστοι καὶ τελευταῖοι πλὴν τῶν ἐν Σικελίᾳ ὑπὸ Λακεδαιμονίων κατελύθησαν [...], μετὰ δὲ τὴν τῶν τυράννων κατάλυσιν ἐκ τῆς Ἑλλάδος οὐ πολλοὶς ἔτεσιν ὕστερον καὶ ἡ ἐν Μαραθῶνι μάχη Μήδων πρὸς Ἀθηναίους ἐγένετο. (Thucydides, *The Peloponnesian War* 1.18.1-12)

“At length the tyrants both at Athens and in the rest of Hellas (which had been under their dominion long before Athens), at least the greater number of them, and with the exception of the Sicilian the last who ever ruled, were put down by the Lacedaemonians [...]. [De] Not long after the overthrow of the tyrants by the Lacedaemonians, the battle of Marathon was fought between the Athenians and the Persians.” (tr. Jowett 1900)

(4) εἶδος δὲ τῆς μὲν ἵβιος τόδε· [...] τῶν δ’ ἐν ποσὶ μᾶλλον εἰλευμενέων τοῖσι ἀνθρώποισι (διξαὶ γὰρ δὴ εἰσι ἵβιες) ψιλὴ τὴν κεφαλὴν καὶ τὴν δειρὴν πᾶσαν, λευκὴ πτεροῖσι πλὴν κεφαλῆς καὶ αὐχένος καὶ ἀκρέων τῶν πτερύγων καὶ τοῦ πυγαίου ἄκρου (ταῦτα δὲ τὰ εἶπον πάντα μέλανα ἐστὶ δεινῶς), [...]. (Herodotus, *Histories* 2.76.1-9)

⁵ In the rest of this chapter, I use ‘δέ utterance’ and ‘δέ segment’ as shorthand to refer to ‘the utterance (or segment) marked by δέ’.

⁶ Note that Levinsohn’s area of interest is the New Testament.

“The outward form of the ibis is this: [...] of those which most crowd round men's feet (for there are two several kinds of ibises) the head is bare and also the whole of the throat, and it is white in feathering except the head and neck and the extremities of the wings and the rump (in all these parts [*de*] of which I have spoken it is a deep black), [...]” (tr. Macaulay 1890)

Example (3) contains an instance of a change in temporal setting – the previous situation (the fall of the tyrants) has now taken place, and the narrator transitions to the phase following that situation. In (4), the segment marked by *δέ* introduces a background comment by the narrator – in the earlier part of this paragraph (which has been cut here), he had already mentioned that the ibis is ‘black all over’ (*μέλαινα δεινῶς πᾶσα*); the more important part of the description here is that it also has white parts in its feathering.

Another approach which is somewhere between the pre-theoretical Stage II and coherence-based Stage III analyses is Klein’s (1992) paper on the different systems of conjunction in Indo-European. According to him, *δέ* in Homer is “the primary means of signaling discourse continuation” (1992: 26), and he compares its function to that of a stitch,

“holding together the constituents of a series which, even as they create a many-faceted whole, remain individual sections conjoined in the cumulative manner so characteristic of Homeric verse composition” (1992: 33).

As opposed to Levinsohn (1987) and Larsen (2001), then, Klein underlines that *δέ* has a ‘continuous’ aspect as well in that it conjoins separate parts of a larger whole.

Sicking’s views (1993: 12) are very similar – he compares *δέ* to *καί* (‘and’) and concludes that

“The use of *δέ* [...] results in a certain discontinuity, unlike that of *καί*, which establishes a connection between what precedes and what follows: an instance of *δέ* placed after a constituent indicates the beginning of a new section, an instance of *καί* placed before a constituent is a mark of continuity.”

He goes on to argue that this discontinuity is balanced by an element of continuity inherent in *δέ* which connects the preceding segment and the *δέ*-segment as part of “a larger argumentative or narrative whole which is coherent at its own level” (1993: 47).

With Sicking, we pass into Stage III approaches to *δέ*. The most exhaustive and, to my mind, best analyses of *δέ* are Bakker (1993) and Black (2002) – although their views are certainly indebted to the earlier approaches discussed here, their accounts are more refined, exhaustive and theoretically founded.

3.1.2 Stage III approaches: on Bakker, Black and discontinuity

I will first turn to Bakker's analysis of δέ, and then (briefly) turn to Stephanie Black's – her analysis is along the same lines as Bakker's, and should be considered an extension of the ideas which come to the fore in his paper.

3.1.2.1 Bakker's proposal: boundary marking and discontinuity

Bakker's analysis of δέ is both wide-ranging and in-depth. He discusses a range of examples, especially from Herodotus and Classical Greek, and discusses each instance thoroughly. According to him, δέ has, at its core, a 'boundary-marking' function which marks the segment it belongs to as being discontinuous from the previous one in some sense. He distinguishes between three different uses for δέ – one cognitive (restricted to Homeric Greek), another 'text-organizing' (i.e., functioning at what amounts to Kroon's (1995) presentational level); the last one can occur when it is used correlatively with another DM, μὲν. I will discuss each of these in turn and in some detail.

'Cognitive' use: linking intonation units

This use of δέ, according to Bakker, is limited to Homer. Homer occupies a special place in Ancient Greek literature and linguistics for a variety of reasons, but one of these is the 'orality' of his texts. Homer is commonly regarded as a *rhapsodos* – a performer who was proficient at reciting (especially) the *Iliad* and *Odyssey*. The texts which we now regard as 'Homeric' were probably performed by Homer orally, and written down and handed down to us through the manuscript tradition. As such, linguistic theories which were developed specifically for oral discourse (such as discourse analysis) have been fruitfully applied to the Homeric corpus (see e.g. Bakker 1990, 1997; Janse 1998; Edwards 2002). Bakker's framework for dealing with δέ in Homer fits into this category of research – he implements insights gleaned from the work of the cognitive linguist Wallace Chafe (1987, 1988a), whose work centers on oral discourse.⁷

Bakker assumes, following Chafe, that Homeric discourse is made up of discourse segments, which Chafe regards as 'chunks' of information. He calls these segments 'intonation units', as they were probably separated from each other in a primarily prosodic fashion (e.g. declining pitch or extension of the final syllable).⁸ These intonation units can be linked via DMs – according to Bakker, δέ is "the most neutral linkage marker" between these segments in Homer, and its function lies in indicating

⁷ See also Chafe (1994) – this book was published after Bakker's paper but collects and develops Chafe's core ideas in their fullest iteration.

⁸ See Cruttenden (1986: 39) and Chafe (1994: 58-60) for more detail; Janse (1993: 19) for Ancient Greek.

“progression” or “continuation” (1993: 279).⁹ He provides the following example (1993: 280); see (21) in §1.1.3.1 for another Homeric example:

(5) ὁτρύνων μαχέσασθαι, ἔγειρε δὲ φύλοπιν αἰνὴν.
οἳ δ' ἐλελίχθησαν καὶ ἐναντίοι ἔσταν Ἀχαιῶν,
Ἀργεῖοι δ' ἐτέρωθεν ἐκαρτύναντο φάλαγγας.
ἀρτύνθη δὲ μάχη, στὰν δ' ἀντίοι ἐν δ' Ἀγαμέμνων
πρῶτος ὄρουσ', ἔθελεν δὲ πολὺ προμάχεσθαι ἀπάντων. (Homer, *Iliad* 11.213-217)
Hector exhorted his men to fight, he roused [δε] fierce battle.
They [δε] rallied and faced the Greeks;
The Greeks [δε] on their part, they strengthened their rows;
[δε] battle was prepared, they stood [δε] opposite each other; [δε] Agamemnon
was the first to rush forward; he wanted [δε] to fight ahead of everyone else. (tr.
Bakker, with alterations)

According to Bakker, each δέ in (5) introduces a new, separate segment, and is hence a marker of discontinuity – more specifically, it separates “clausal intonation units” from each other. At the same time, it also links them to each other as steps “in the progression of the narrative” (1993: 280).

‘Text-organizing’ use: structuring discourse

The second use of δέ postulated by Bakker is linked to discourse coherence (although he does not refer to it as such). On this use, δέ helps the writer organize the structure of his narrative (or his argumentation) by marking a transition to a new discourse participant, a new thematic section, or a shift in perspective. Bakker states that this use of δέ is restricted to written texts – it marks boundaries which are due “to conscious, text-creative factors rather than to unconscious, cognitive ones” (1993: 281). This entails both that cognitive approaches should limit themselves to unconscious processes, and that considerations of discourse organization (and, hence, coherence) are not to be construed in a cognitive sense. I will return to these points shortly.

Switch-reference

The first use of ‘text-organizing’ δέ which Bakker discusses is related to a switch in participants “in a given scene”, usually in order to avoid ambiguity. In most cases, the switch is local – it does not involve a broader change of place, time, or cast of

⁹ See also Drummen (2015: 72-73) – according to her, δέ “has a relatively neutral function, signaling that a new step in the discourse has begun.”

participants (1993: 282). As such, it helps the hearer keep track of the referents which are ‘on scene’ (1993: 284):

(6) Οἱ δὲ Πέρσαι καὶ ὁ ἄλλος ὄμιλος, ὥς κατέφυγον ἐς τὸ ξύλινον τεῖχος, ἔφθισαν ἐπὶ τοὺς πύργους ἀναβάντες πρὶν ἢ τοὺς Λακεδαιμονίους ἀπικέσθαι, ἀναβάντες δὲ ἐφράξαντο ὥς ἐδυνέατο ἄριστα τὸ τεῖχος. Προσελθόντων δὲ τῶν Ἀθηναίων κατεστήκεε σφι τειχομαχίῃ ἐρρωμενεστέρῃ· ἕως μὲν γὰρ ἀπῆσαν οἱ Ἀθηναῖοι, οἱ δὲ ἡμύνοντο καὶ πολλῶ πλεον εἶχον τῶν Λακεδαιμονίων (Herodotus, *Histories* 9.70.1-7)

“The Persians and their allies were faster than the Spartans in their flight to the wooden wall. They went up and defended the wall as well as they could. After the arrival of the Spartans a major battle was fought over the wall. As long as the Athenians were still not there, they [*de*] were able to defend themselves and had a considerable advantage over the Spartans (example and tr. Bakker 1993: 282)

In this example, οἱ δέ refers to the Persians – it involves a local switch in participants. The subordinate clause introduced by ἕως was concerned with the Athenians, but the main clause switches the focus of the narrator to the Persians. As Bakker (1993: 283) points out, the discourse “was already concerned with” the Persians – the subordinate clause involved a brief switch of subject to the Athenians, but, with οἱ δέ, the “original topic” is “restored”.¹⁰

Thematic breaks

This use of ‘text-organizing’ δέ is more global than the first use – it is used to mark “a new event sequence” which is thematically independent of the previous one (1993: 285). As such, it will often go hand in hand with a change in time, location or set of participants. It is also more globally discontinuous than switch-reference δέ in a syntactic sense – this use of δέ is often coordinated with subordinate clauses or participles, for instance, while switch-reference δέ is only employed with separate constituents.

(7) Ὡς δὲ γινῶναι αὐτὸν ἐν οἴῳ κακῷ ἦν, ἰθέως καλέειν τὸν ἀδελφεὸν καὶ δηλοῦν αὐτῷ τὰ παρεόντα καὶ κελεύειν τὴν ταχίστην ἐσδύντα ἀποταμεῖν αὐτοῦ τὴν κεφαλὴν,

¹⁰ The linguistic notion of ‘topic’ has received an extraordinary amount of attention in the last thirty years or so. As with the term ‘discourse marker’, there is still no real agreement on how to delineate a topic as a discrete part of the information structure of a given unit, nor on whether there are subclasses of topics (nor how many subclasses would exist; see Soltic (2015: 47-52) for an overview). I will get into the notion of ‘topic’ later on, in my own analysis of δέ – for the purposes of this citation from Bakker’s paper, it suffices to regard a topic, for now, as ‘that element which the segment is about from an informational point of view’.

ὅκως μὴ αὐτὸς ὀφθῇς καὶ γνωρισθῇς ὃς εἴη προσαπολέσει κάκεῖνον. Τῷ δὲ δόξαι εὖ λέγειν καὶ ποιῆσαι μιν πεισθέντα ταῦτα καὶ καταρμόσαντα τὸν λίθον ἀπιέναι ἐπ’ οἴκου, φέροντα τὴν κεφαλὴν τοῦ ἀδελφεοῦ. Ὡς δὲ ἡμέρη ἐγένετο, ἐσελθόντα τὸν βασιλέα ἐς τὸ οἶκημα ἐκπεπλήχθαι ὁρῶντα τὸ σῶμα τοῦ φωρὸς ἐν τῇ πάγῃ ἄνευ τῆς κεφαλῆς ἐόν. (Herodotus, *Histories* 2.121.11-121γ.4)

[Two thieves enter a king’s treasure chamber, but one of them is caught by one of the traps set up by the king.] “Realizing the danger, he called his brother and begged him to come in as quickly as he could and cut off his head, to prevent the recognition of his dead body and the ruin of both. The brother, seeing the sense of this request, did as he was told. He fitted the stone back in its place, and went home, taking the head with him. When [de] day broke, the king entered his treasure house. And how great was his astonishment when he saw the headless body of the thief in the trap.” (example and tr. Bakker 1993: 286).

The temporal subclause, marked by δέ, can be considered the starting point of a new ‘event sequence’ – it marks a “thematic break in the narrative”, where the narrator transitions from the description of the thieves’ break-in to the reaction of the king (1993: 286).

(8) ὁ δ’ Ἐρατοσθένης, ὃ ἄνδρες, εἰσέρχεται, καὶ ἡ θεράπεινα ἐπεγείρασά με εὐθὺς φράζει ὅτι ἔνδον ἐστί. ἀγὼ εἰπὼν ἐκείνῃ ἐπιμελεῖσθαι τῆς θύρας, καταβὰς σιωπῇ ἐξέρχομαι, καὶ ἀφικνοῦμαι ὡς τὸν καὶ τόν, καὶ τοὺς μὲν ἔνδον κατέλαβον, τοὺς δὲ οὐκ ἐπιδημοῦντας ἡῦρον. παραλαβὼν δ’ ὡς οἶόν τε ἦν πλείστους ἐκ τῶν παρόντων ἐβάδιζον. καὶ δᾶδας λαβόντες ἐκ τοῦ ἐγγύτατα καπηλείου εἰσερχόμεθα, ἀνεωγμένης τῆς θύρας καὶ ὑπὸ τῆς ἀνθρώπου παρεσκευασμένης. ῥσάντες δὲ τὴν θύραν τοῦ δωματίου, ... (Lysias, *On the Murder of Eratosthenes* 23.2-24.5)

“And then Eratosthenes enters the house, men of the jury, and the maid wakes me and says he’s inside. And I told her to watch the door, went down silently and went outside, and I called at some friends of mine and some of them were not at home, others were not even in town. Having brought with me [de] as many as I could of those who were available, I marched up. And we took torches from the shop nearby and went inside, the door being open due to the attention of the maid. Having pushed open [de] the door of the bedroom, ...” (example and tr. Bakker 1993: 289)

In this case, the two participles (παραλαβὼν and ῥσάντες) are marked by δέ. Both state “the outcome of the activity of the previous discourse” (in the case of παραλαβὼν, searching for the narrator’s friends; in the case of ῥσάντες, going up to the door of the bedroom) as “the starting-point [sic] for the following actions in the story”, and not “as an independently asserted narrative fact” (1993: 289).

In example (7) and (8), then, δέ marks thematic breaks in the narrative, subjoined to either a temporal subclause or a participle. As such, it organizes the text into different segments which the narrator introduces by referring back to the previous ‘event sequence’.

Shifts in points of view

Whereas switch-reference δέ deals with discontinuity in terms of discourse participants and ‘thematic-break’ δέ deals with discontinuity in terms of thematic sections, this type of δέ deals with ‘perspectival’ discontinuity – that is, “the perspective from which a narrative is presented” (1993: 290).

(9) ὥσαντες δὲ τὴν θύραν τοῦ δωματίου οἱ μὲν πρῶτοι εἰσιόντες ἔτι εἶδομεν αὐτὸν κατακείμενον παρὰ τῇ γυναικί, οἱ δ’ ὕστερον ἐν τῇ κλίνῃ γυμνὸν ἐστηκότα. ἐγὼ δ’, ὦ ἄνδρες, πατάξας καταβάλλω αὐτόν (Lysias, *On the Murder of Eratosthenes* 24.4-25.2)

“Having pushed open the door of the bedroom, the first of us who entered saw him still lying in bed with the woman, and those who came in after him saw him standing naked in the bed. I[*de*] hit him, men of Athens, and threw him on the ground.” (example and tr. Bakker 1993: 292, with alterations)

Here, δέ marks a shift in perspective – from the narrator’s friends to the narrator himself. As such, it “restores the original point of view in the story” (ibid.). In that sense, it is not really clear how this ‘perspectival’ use differs from the switch-reference one. While switch-reference δέ may be used to avoid referential ambiguity, it is *de facto* used to signal a change in perspective – in example (6), for instance, οἱ δέ marks a shift in perspective, even if it also helps the audience keep track of the different participants in the narrative. While it may be true that there is some difference between switch-reference and ‘perspectival’ δέ, then, it is not at all obvious that this difference is important enough to warrant a functional distinction between the two.

The μέν-δέ pair

The three ‘text-organizing’ uses distinguished by Bakker all mark a certain boundary and, hence, a certain discontinuity. On Bakker’s analysis, this ‘boundary-marking’ (or ‘discontinuity-marking’) function is central to the meaning of δέ. However, he argues that δέ often marks a discontinuity which is very different the text-organizing uses if it is preceded by the DM μέν. Μέν and δέ together form what Bakker calls a “correlative pair” – in these cases, δέ can signal either discourse complementation or discourse transitions (1993: 299). If δέ is used in conjunction with μέν, then, it functions differently than if it occurs on its own – however, it still functions as a marker of boundaries.

Μέν and δέ (I): discourse complementation

On the discourse complementation use, the segment marked by μέν is antithetically opposed to the segment marked by δέ. Μέν here marks “anticipatory cohesion”, with δέ answering the information presented in the previous segment with information which is semantically antithetical.

(10) Δαρείου καὶ Παρυσάτιδος γίνονται παῖδες δύο, πρεσβύτερος μὲν Ἀρταξέρξης, νεώτερος δὲ Κῦρος. (Xenophon, *Anabasis* 1.1.1.1-2)

“Darius and Parysatis had two sons, the elder [*men*] was Artaxerxes, the younger [*de*] Cyrus.” (example and tr. Bakker 1993: 299)

(11) μέχρι μὲν οὖν οἱ τοξόται εἶχόν τε τὰ βέλη αὐτοῖς καὶ οἳοί τε ἦσαν χρῆσθαι, οἱ δὲ ἀντεῖχον [...] ἐπειδὴ δὲ τοῦ τε τοξάρχου ἀποθανόντος οὗτοι διεσκεδάσθησαν καὶ αὐτοὶ ἐκεκμήκεσαν. (Thucydides, *The Peloponnesian War* 3.98.1-4)

“As long as [*men*] the archers had their arrows with them and were able to use them, they [i.e., the Athenians, οἱ δέ] could hold their ground. When [*de*] their leader was dead, they were scattered all over the place, and they themselves were defeated.” (example and tr. Bakker 1993: 302)

In example (10), two constituents are antithetically opposed: the younger son, marked by δέ, is anticipated by and contrasted with the elder son, marked by μέν. In (11), two situations are contrasted – the earlier situation, in which the archers were shooting their arrows, is marked by μέν; the transition to a new situation, in which the archers’ leader has died, is marked by δέ.¹¹ In (10), then, the antithesis applies to the level of the NP; in (11), it applies to the proposition as a whole.

Μέν and δέ (II): transition

The use exemplified in (10) and (11) should be distinguished from the ‘transitional’ use of the μέν-δέ construction, according to Bakker. This latter use is not necessarily based on a semantic opposition between the information provided in the respective segments, but rather has to do with discourse organization. The segment marked by μέν forms the end of the theme which had been discussed up until that point, paving the way for a new theme introduced in the δέ-segment. As such, δέ on this use signals a thematic break.

¹¹ Note that the δέ in οἱ δέ here would mark a switch-reference on Bakker’s account, and is not part of the μέν-δέ antithesis.

(12) Ἀρπάγῳ μὲν Ἀστυάγης δίκην ταύτην ἐπέθηκε. Κύρου δὲ περὶ βουλευόντων ἐκάλεσε τοὺς αὐτοὺς τῶν μάγων οἱ τὸ ἐνύπνιον οἱ ταύτῃ ἔκριναν. (Herodotus, *Histories* 1.120.1-3)

“Harpagus [*men*] was punished by Astyages in this way. It was Cyrus [*de*] to whom he now turned his attention, and he summoned the same men of the Magians who had given judgment about his dream in the manner which has been said.” (example and tr. Bakker 1993: 303, extended with Macaulay’s (1890) translation)

(13) Ἡ μὲν δὴ ὄψις τοῦ Ἱππάρχου ἐνυπνίου καὶ οἱ Γεφυραῖοι ὅθεν ἐγεγόνεσαν, τῶν ἦσαν οἱ Ἱππάρχου φονέες, ἀπήγηταί μοι· δεῖ δὲ πρὸς τούτοις ἔτι ἀναλαβεῖν τὸν κατ’ ἀρχὰς ἥια λέξων λόγον, ὥς τυράννων ἐλευθερώθησαν Ἀθηναῖοι. (Herodotus, *Histories* 5.62.1-5)

“Hipparchus’ dream [*men*] as well as the descent of the Gephyraei, the family who murdered him, I have dealt with. I have to [*de*] go back to the original story of how Athens came to be liberated from the tyrants.” (example and tr. Bakker 1993: 304, with alterations)

In (12), as in (10), the transition is primarily found at the level of the NP – the matter with Harpagus is now finished, and Astyages has turned his attention to Cyrus. Even though the μὲν-δέ pair is primarily related to a constituent (Ἀρπάγῳ and Κύρου, respectively), δέ does in fact signal a transition to a “new thematic section” – i.e., the story of how Astyages dealt with Cyrus (1993: 303). In (13), by contrast, the transition is more global (as it was in (11)): Hipparchus’ dream and the descent of the Gephyraei both fall under the scope of μὲν. Δέ here marks an explicit transition to another thematic section – the story of how Athens threw off the yoke of tyranny. Note that (13) is a metadiscursive example of the transitional use of the μὲν-δέ construction – the narrator (Herodotus) explicitly indicates how he will structure his discourse, and marks the transition from one section of the narrative to another via the μὲν-δέ pair.

As for the ‘text-organizing’ uses of δέ, the question again can be asked as to how far we should really go in distinguishing the ‘complementation’ use from the ‘transition’ use of the μὲν-δέ construction. Bakker does not specify how he sees the relationship between the two – are these functionally distinct uses which are derived from a basic use, or are they truly polysemous? If Bakker means to suggest that δέ is truly polysemous, δέ would not be rigid and, hence, not procedural. If the different uses are broadly similar, on the other hand, how are they related to the ‘cognitive’ and ‘text-organizing’ uses (i.e., the uses of ‘solitary’ δέ)? Bakker states that “[t]he presence of *mén* often implies a quite different function of the boundary marked by *dé*” than the uses he describes of solitary δέ, but the way in which he puts this leaves room for interpretation – the fact that he still sees δέ as a ‘boundary marker’, even when it is used in conjunction with μὲν, would seem to point to a unitary approach. On the other hand, a ‘quite different function’ would seem to imply, at the very least, some functional

difference between the uses proposed for solitary $\delta\acute{\epsilon}$, and those postulated for the $\mu\acute{\epsilon}\nu\text{-}\delta\acute{\epsilon}$ construction.

The difficulty in assessing how the different uses of $\delta\acute{\epsilon}$ are connected to each other is symptomatic of the single most glaring problem with Bakker's analysis – its vagueness and general lack of terminological and definitional depth. Bakker's notion of 'cognitive' $\delta\acute{\epsilon}$, for instance, seems overly restrictive; at the very least, his choice to designate this type of $\delta\acute{\epsilon}$ as 'cognitive' (implying that the other uses of $\delta\acute{\epsilon}$ are *non*-cognitive) seems ill-inspired. The idea that that oral discourse somehow gives rise to a distinct, 'cognitive' $\delta\acute{\epsilon}$, would require more explanation than Bakker provides – the relevance-theoretic comprehension heuristic, for instance, applies to oral and written discourse equally (see Sperber & Wilson (1995²: 75)). Bakker also equates cognitive processes with unconscious processes, which would not work on a truly cognitive account – cognitive considerations underlie every linguistic act, conscious or unconscious. Speakers can use DMs, for instance, either spontaneously or as part of planned discourse, but, in both cases, they will help the audience understand the utterance in a way which is cognitively least effort-intensive. Bakker's point that his text-organizational (or, in the terms discussed in chapter 1, 'presentational') use of $\delta\acute{\epsilon}$ is non-cognitive is true, but not in the sense he means – they are non-cognitive because there is no widely accepted (or acceptable) account of coherence (or text organization) in strictly cognitive terms.

Following Chafe, Bakker states that intonation units are also at the same time information units, each containing "relatively small pieces of information in the speaker's consciousness" (1993: 279), and that $\delta\acute{\epsilon}$ separates these 'pieces of information' from each other. However, why would this not apply to written discourse as well – surely $\delta\acute{\epsilon}$ in written discourse also separates information units (that is, discourse segments) from each other? Indeed, it is difficult to construe Bakker's analysis of $\delta\acute{\epsilon}$ as a marker of thematic breaks as anything else than a written counterpart of the 'cognitive' $\delta\acute{\epsilon}$ which, according to him, is limited to Homer. Additionally, even if we accept that there is an 'oral' ('cognitive') $\delta\acute{\epsilon}$, it is not clear that the texts which Bakker subsumes under his 'written' examples of $\delta\acute{\epsilon}$ are, in fact, unequivocally 'written'. Bakker (1997: 8) himself distinguishes between texts which are conceptually oral and those which are medially oral. Homer, Bakker (1997) points out, has been transmitted only in written texts to us, but his texts are conceptually oral – they were meant to be performed orally, and were designed specifically with an audience (in the strictest sense of the word) in mind. Yet other examples which Bakker cites are conceptually oral in this sense as well – Lysias' *On the Murder of Eratosthenes*, for example (see examples (8) and (9) *supra*), is an obvious candidate for just such a treatment, as it makes explicit reference to a jury to which the speech is directed (cf. the vocative $\tilde{\omega}\ \acute{\alpha}\nu\delta\rho\epsilon\varsigma$). Herodotus, too, was probably an oral performer (Murray 2007: 315; Fowler 2007: 107; Slings 2002). If the 'cognitive' use of $\delta\acute{\epsilon}$ is restricted to conceptually oral texts, then, it will have to be extended to incorporate (at minimum) Lysias and Herodotus.

The ‘cognitive’ use of *δέ*, then, does not seem particularly well-defined. There are other concepts which suffer from the same drawback – most notably Bakker’s ‘event sequence’, which is central to his proposed use of *δέ* as a marker of thematic breaks, and, more importantly, his ‘boundary-marking’ function, which underlies all uses of *δέ*. The notion of an ‘event sequence’, first, is never cashed out theoretically – and neither, for that matter, is the term ‘thematic’. Yet these concepts form the backbone of Bakker’s account of ‘thematic break’ *δέ*, which marks breaks between ‘event sequences’. If they are to be construed in a semantic sense, we immediately run into problems. In example (7), for instance, the new ‘event sequence’ makes clear reference to the previous ‘event sequence’ (e.g. by mentioning τὸ σῶμα τοῦ φωρὸς, ‘the body of the thief’, which was lying in the trap set by the king); the same is true for example (8) – and all examples which start with a participle which summarizes the outcome of the previous ‘event sequence’ –, where the previous ‘event sequence’ is obviously still relevant for the interpretation of the next ‘event sequence’ marked by *δέ*. The ‘thematic break’ or ‘event sequence’ cannot be contextual either, for the very same reasons outlined here – the contextual assumptions established in the previous ‘event sequence’ are very much relevant for the interpretation of the *δέ*-segment. If ‘event sequences’ refer to ‘discourse segments’, then it suffers from the problems inherent to any coherence approach, which were discussed in great detail in the previous chapter. It would seem as if, in examples (7) and (8), a ‘thematic break’ coincides with a temporal transition – the narrator simply proceeds to the next step in his story. But it is not clear to me how this amounts to a ‘thematic break’ in any interesting sense.

It is also unclear whether a core function of ‘boundary marking’ or ‘discontinuity’ sets off *δέ* from other DMs sufficiently. More specifically, this proposal seems to blur the distinction with the DM *ἀλλά*, since the latter is also commonly regarded as pointing to some form of boundary or discontinuity:

(14) Ἔσταισι δὲ οὗτοι ἐν τῷ Κορινθίων θησαυρῷ σταθμὸν ἔχοντες τριήκοντα τάλαντα· ἀληθεί δὲ λόγῳ χρεωμένῳ οὐ Κορινθίων τοῦ δημοσίου ἐστὶ ὁ θησαυρός, ἀλλὰ Κυψέλου τοῦ Ἡετίωνος. (Herodotus, *Histories* 1.14.7-10)

[Gyges, the king of Lydia, dedicated some golden mixing-bowls to the sanctuary at Delphi:] “of these the weight is thirty talents, and they stand in the treasury of the Corinthians, (though in truth this treasury does not belong to the Corinthian people, [*alla*] is that of Cypselus the son of Aëtion).” (tr. Macaulay (1890), with alterations)

Here, *ἀλλά* introduces what Bakker calls “eliminative identification” (1993: 297), but what might be designated more straightforwardly ‘elimination of a previous

assumption’ (see Blakemore (2002) on English *but*; Drummen (2009) on *ἀλλά*).¹² A previous assumption (that the treasury of the Corinthians at Delphi belongs to the Corinthians), which was already negated (οὐ Κορινθίων τοῦ δημοσίου), is replaced by the correct assumption (the treasury actually belongs to Cypselus) in the form of a ‘not X ἀλλά Y’ construction. This, of course, could also be seen as a sign of a boundary or discontinuity – a previous assumption is eliminated in favor of a new assumption. As such, there is a discontinuity or boundary between the expectation raised by the previous utterance (i.e., that the treasury belonged to the Corinthian people) and the reality expressed in the utterance marked by *ἀλλά*.

(15) {ΕΥΘ.} Τοῦτο τοίνυν ἔμοιγε δοκεῖ, ὦ Σώκρατες, τὸ μέρος τοῦ δικαίου εἶναι εὐσεβές τε καὶ ὅσιον, τὸ περὶ τῆν τῶν θεῶν θεραπείαν, τὸ δὲ περὶ τῆν τῶν ἀνθρώπων τὸ λοιπὸν εἶναι τοῦ δικαίου μέρος.

{ΣΩ.} Καὶ καλῶς γέ μοι, ὦ Εὐθύφρων, φαίνει λέγειν, ἀλλὰ σμικροῦ τινος ἔτι ἐνδεής εἰμι• (Plato, *Euthyphro* 12e5-13a1)

“{Euthyphro} This then is my opinion, Socrates, that the part of the right which has to do with attention to the gods constitutes piety and holiness, and that the remaining part of the right is that which has to do with the service of men.

{Socrates} I think you are correct, Euthyphro; [*alla*] there is one little point about which I still want information.” (tr. Fowler 1914)

In (15), *ἀλλά* appears in a different, non-eliminative context. Socrates does not want to deny his previous agreement with Euthyphro, but there is still obvious discontinuity here – he agrees with Euthyphro, but that does not mean that the matter is settled. Socrates wants to delve into a point of what Euthyphro said – as such, his agreement with Euthyphro is qualified by the *ἀλλά*-clause. Examples like (14) and (15) demonstrate that *ἀλλά* also marks a boundary (or that it is ‘discontinuous’), and, hence, that the hypothesis that *δέ* marks a boundary (or that it is ‘discontinuous’) is not subtle enough to distinguish it from *ἀλλά*.

At the same time, Bakker’s account is, to my mind, certainly on the right track by focusing on the notions of ‘boundary-marking’ and (especially) ‘discontinuity’. Black’s (2002) approach builds on the principles outlined by Bakker (even though she is not explicit about this), and provides a more specific alternative for *δέ*’s meaning. Yet as we will see, it still suffers from the same lack of terminological and definitional vagueness.¹³

¹² Levinsohn calls it ‘negated antonym paraphrase’ (1987: 156).

¹³ I should emphasize here that both Bakker’s and Black’s analyses are tremendous studies in the particular semantics of *δέ*, and that they have helped me enormously in crafting my own account. However, this does not mean that their conclusions cannot be improved – which I aim to do by applying principles from a theory

3.1.2.2 Black's proposal: 'low- to mid-level' discontinuity

I will not discuss Black's (2002) account in quite the same detail as I did Bakker's. Many of the points Black makes evoke Bakker's, and the similarities are legion. The difference between the two is that Black's proposal for δέ's core meaning fits the available data better – although Black only analyzes the Gospel of Matthew, her analysis is, in fact, quite applicable to δέ in Bakker's examples as well. According to Black,

“Δέ [...] indicates low- to mid-level discontinuity. That is, the presence of δέ introducing a sentence cues the audience that some change is to be incorporated into their mental representation of the discourse. Such cues facilitate the processing of discourse [...] informing the audience that in some respect continuity is not maintained at this point in the discourse.” (2002: 144)

Black retains the idea that δέ encodes some sort of discontinuity, but she qualifies it by adding the 'low- to mid-level' qualifier (see also Klein (1992) and Sicking (1993), whose accounts I discussed in §3.1.1). This presumably means that there are other DMs (or at least other linguistic resources) available to the speaker/writer to indicate high-level discontinuity, but, curiously, Black does not develop this idea.¹⁴ In my own analysis of δέ (§3.2), I will show that Black's idea of a continuum of (dis)continuity holds water, and that there is a cline of continuity from καί (*and*; most continuous) to δέ (more discontinuous) and ἀλλά (most discontinuous) (cf. also Porter & O'Donnell 2007: 10).

Black goes on to demonstrate the different contexts in which δέ can occur, but there is nothing really new here compared to Bakker's taxonomy of contexts outlined above. In fact, many of these contexts were already discussed in analyses preceding Bakker (see especially Levinsohn 1987 and Larsen 2001) – they include changes of participant (2002: 158), temporal shifts (2002: 163-164), backgrounded material (2002: 164-166) and, from a more syntactic point of view, genitive absolute participial constructions (2002: 162-163):

(16) Ὅταν οὖν ποιῇς ἐλεημοσύνην, μὴ σαλπίσσης ἔμπροσθέν σου, ὥσπερ οἱ ὑποκριταὶ ποιοῦσιν ἐν ταῖς συναγωγαῖς καὶ ἐν ταῖς ῥύμαις, ὅπως δοξασθῶσιν ὑπὸ τῶν ἀνθρώπων· ἀμὴν λέγω ὑμῖν, ἀπέχουσιν τὸν μισθὸν αὐτῶν. (3.) σοῦ δὲ ποιοῦντος ἐλεημοσύνην μὴ γνῶτω ἡ ἀριστερά σου τί ποιεῖ ἡ δεξιὰ σου. (*Gospel of Matthew*, 6.2-6.3)

“Thus, when you give to the needy, sound no trumpet before you, as the hypocrites do in the synagogues and in the streets, that they may be praised by others. Truly, I say

which provides the theoretical machinery for a cognitively realistic and terminologically rigorous semantic analysis.

¹⁴ Black does not discuss ἀλλά, which is one possible candidate for a DM which indicates high-level discontinuity.

to you, they have received their reward. (3) But when you [de] give to the needy, do not let your left hand know what your right hand is doing. (tr. English Standard Version)

In (16), the genitive absolute σοῦ ποιούντος ἐλεημοσύνην is part of the linguistic material marked by δέ – it is discontinuous in that σοῦ is contrasted with the ‘hypocrites’ (οἱ ὑποκριταί) from the previous segment, but there is also some continuity here. Ὅταν οὖν ποιῇς ἐλεημοσύνην, which began the excerpt here, is reprised in the genitive absolute – repetition implies continuity, as the information repeated was already relevant for the interpretation of the previous segment.

There are still major problems with Black’s account. One of these has already been mentioned – the lack of a DM related to ‘high-level’ discontinuity decreases the value and limits the applicability of the ‘low- to mid-level discontinuity’ linked to δέ. If ‘low- to mid-level’ discontinuity is the only discontinuity in town, then ‘low-to mid-level discontinuity’ is, for all intents and purposes, also high-level discontinuity. In that sense, Black’s account seems to be pretty close to Bakker’s. However, the idea that there are different types of discontinuity, and that δέ marks only one (or some) of these types, is a significant step forward.

Another problem is that Black’s analysis is, like Bakker’s, quite vague and largely taxonomic – both Bakker and Black provide an exhaustive enumeration of contexts in which δέ can appear (change of participant, change of temporal setting, thematic discontinuity, and so on), but their proposals for δέ’s core meaning are fuzzy. Consider Black’s quote above (2002: 144): δέ introduces *some* change, and informs the audience that *in some respect* continuity is not maintained. There is no further elaboration on how this change and discontinuity are to be understood. The question is whether this definition is not too vague, especially in light of other DMs which can point to ‘some change’ and discontinuity ‘in some respect’. In my own analysis of δέ, which I now turn to, I attempt to tease out a core function for δέ which is still widely applicable, but at the same time more clearly delineates δέ as separate from other DMs (and καί and ἀλλά in particular).

3.2 Taking a fresh look at δέ: a relevance-theoretic approach

In this section, I will present a qualitative analysis of δέ’s function in my corpus of texts. I will first outline some fundamental properties of its meaning, before turning to the question of whether it can be considered a procedural item. After determining that δέ is indeed procedural, I will turn to several different contexts in which δέ occurs to get a sense of its basic value. Then, I will discuss some specific contexts which preclude a

unitary (or even systematic) analysis on a coherence approach to δέ. Finally, I will propose a procedural rule for δέ and make a first attempt at a cline of (dis)continuity, in which δέ's function is placed in the wider context of Ancient Greek coordination. Every section will contain a broad-ranging set of examples which will exemplify the points I attempt to make.

3.2.1 On δέ's basic value: between discontinuity and continuity

I will not attempt to disprove the notion that δέ can be used in contrastive contexts (see e.g. Denniston 1954²), or that it often occurs where a change of participants, time or perspective takes place (see e.g. Bakker 1993 and Black 2002). My corpus is full of instances which can be taken as such:

(17) Ἄλλ' οἱ τῶν ἄστρον τὰ διαστήματα καταμετροῦντες, καὶ τοὺς ἀειφανεῖς αὐτῶν καὶ ἀρκτῶους ἀπογραφόμενοι, καὶ ὅσοι περὶ τὸν νότιον πόλον κείμενοι τοῖς μὲν εἰσι φανεροὶ, ἡμῖν δὲ ἄγνωστοι, [...]. (Bas. *Hex.* I.4.4-7)

[Basil is criticizing pagan scientists:] “But these men who measure the distances of the stars and who describe both those of the North, always shining brilliantly in our view, and those of the southern pole visible to the inhabitants of the South [*men*], but unknown to us [*de*], [...].”

(18) Τοῦτο μὲν οὖν, ὅπη τῷ Θεῷ φίλον, οὕτως ἐχέτω. [...] Ἐμοὶ δὲ πάλιν πρὸς τὸν αὐτὸν ἐπινίκιον ἀναδραμεῖται ὁ λόγος· Ἐπεσε Βῆλ, συνετρίβη Δαγών, ἔλη ἐγένετο ὁ Σαρὼν, κατησχύνθη ὁ Λίβανος. (Greg. *Iul.* II.700.40-701.5)

“These things [*men*], let them then take their course in what way soever is well-pleasing to God! [...] But my [*de*] speech will again run back to the same song of triumph: ‘Bel hath fallen, Dagon is broken to pieces, Sharon hath become a marsh, Lebanon is ashamed’.”

(19) ἄυπνος τὰ πρῶτα διήγον ἐπὶ τῆς εὐνῆς ἄνω καὶ κάτω τὴν περὶ τῶν νέων φροντίδα στρέφων καὶ τοῦ χρημοῦ τὰ τελευταῖα τί ἄρα βούλοιτο ἀνιχνεύων. Ἦδη δὲ μεσοῦσης τῆς νυκτὸς ὄρῳ τὸν Ἀπόλλω καὶ τὴν Ἄρτεμιν [...]. (Hel. *Aeth.* 3.11.4.5-3.11.5.2)

[At Delphi, Calasiris has just left the festival in honor of Neoptolemus. During the festivities, he noticed that Theagenes and Chariclea fell in love the moment they saw each other for the first time. He had also heard an oracle from the Pythian priestess which he did not understand.] “I lay awake for a while on my bed first, turning over and over in my mind the concern that I felt for the young pair, and trying to trace out what the last part of the oracle meant. When [*de*] midnight came I saw Apollo and Artemis, [...].”

(20) Εἰσὶ τινες πόλεις παντοδαποῖς θεάμασι θαυματοποιῶν ἀπὸ βαθέος ὄρθρου μέχρις ἐσπέρας αὐτῆς ἐστιῶσαι τὰς ὄψεις. Καὶ μέντοι καὶ μελῶν τινων κεκλασμένων καὶ διεφθαρμένων καὶ παντάπασι πολλὴν ἀκολασίαν ταῖς ψυχαῖς ἐντικτόντων ἐπὶ πλεῖστον ἀκούοντες οὐκ ἐμπίμπλονται. [...] Ἦδη δέ τινες τῶν ἵππομανούντων, καὶ ὄναρ ὑπὲρ τῶν ἵππων μάχονται, ἄρματα μεταξευγνύντες καὶ ἡνιόχους μετατιθέντες, καὶ ὅλως τῆς μεθημερινῆς ἀφροσύνης οὐδὲ ἐν ταῖς καθ' ὕπνον φαντασίαις ἀφίστανται. Ἡμεῖς δὲ ἄρα, οὓς ὁ Κύριος, ὁ μέγας θαυματοποιὸς καὶ τεχνίτης, ἐπὶ τὴν ἐπίδειξιν συνεκάλεσε τῶν οἰκείων ἔργων, ἀποκαμούμεθα πρὸς τὴν θέαν, ἢ ἀποκνήσομεν πρὸς τὴν ἀκρόασιν τῶν λογίων τοῦ Πνεύματος; (Bas. Hex. IV.1.1-22)

“There are some towns where the inhabitants, from dawn to eve, feast their eyes on the innumerable tricks of conjurors. They are never fulfilled with hearing dissolute and corrupted songs which cause much impurity to spring up in their souls. [...] [De] some others, who are wild after horses, think they are backing their horses in their dreams; they harness their chariots, change their drivers, and even in sleep are altogether not free from the folly of the day. And shall we [de], whom the Lord, the great worker of marvels, calls to the contemplation of His own works, tire of looking at them, or be slow to hear the words of the Holy Spirit?”

(21) Ἡ μὲν ταῦτα ἐπετραγώδει, οἱ δὲ οὐδὲν συνιέναι τῶν λεγομένων ἔχοντες τοὺς μὲν αὐτοῦ καταλείπουσιν, ἰσχυρὰν αὐτοῖς φυλακὴν τὴν ἀσθένειαν αὐτῶν ἐπιστήσαντες, ἐπὶ δὲ τὴν ναῦν ὀρμήσαντες τὸν φόρτον ἐξήντλουν, τῶν μὲν¹ ἄλλων ὑπερορῶντες (πολλὰ δὲ² ἦν καὶ ποικίλα), χρυσοῦ δὲ¹ καὶ ἀργύρου καὶ λίθων πολυτίμων καὶ σηρικῆς ἐσθῆτος, ὅση δύναμις ἐκάστοις, ἐκφοροῦντες. (Hel. Aeth. 1.3.2.1-1.3.2.8)

[A group of Egyptian brigands has spotted a merchant ship on the shore. Everyone on board has been slain in battle, except for a beautiful young couple, of whom the man is seemingly dying in his lover's arms. The young woman asks the brigands to kill them and release them from their sufferings:] “She said these things to them, in high tragic vein; but the brigands, unable to understand one word of what she said, left the young couple there, deeming their weakness a strong enough guard to be set over them. They then hastened to the ship, which they proceeded to ransack for her cargo. Despising the rest [men¹] of her contents (which were many [de²] and various), of gold [de¹] and silver and precious stones and silken attire they carried off as much as each man could.”

All of these examples can be analyzed along the lines drawn in §3.1. In example (17), we get an instance of an antithetical μέν-δέ pair – the people of the southern hemisphere in μέν are contrasted with ‘us’, i.e., the people in the northern hemisphere, in δέ. In example (18), we get a μέν-δέ construction which marks a thematic transition – the previous subject is concluded by leaving it to God in the μέν segment, and a new (or, in fact, a return to a previous) episode is introduced via the δέ-segment. (19) contains an instance of a thematic break which is very similar to (7) *supra* – a new ‘event sequence’

is introduced, where Calasiris is confronted by an apparition of Apollo and Artemis. In (20), there are two interesting δέ's: the first one introduces a thematic break (or, perhaps, a new participant) – the people who 'feast their eyes' on the tricks of the conjurors and love to hear impure songs are left behind, and a different type of people (those who are obsessed with chariot horses) now becomes the focus of attention. The second δέ involves a change of perspective to ἡμεῖς, who are contrasted with the previous two types of people. These first two types are gripped by impious activities, which leads Basil to ask the rhetorical question whether 'we' (i.e., Christians) will tire of hearing about God's works – in other words, ἡμεῖς should be obsessed with contemplating God's works, just as the previous people were obsessed with less righteous issues. (21), finally, contains a μέν-δέ pair (marked by ¹ to avoid the impression that the other δέ, marked by ², is part of this μέν-δέ pair) which is antithetical: the ἄλλα, i.e., the other goods on board the ship, are disregarded in favor of the gold, silver, gemstones and silk, which are, of course, more valuable, and are hence carried off by the brigands. Δέ², by contrast, marks πολλά ἧν καὶ ποικίλα as being 'background' material, or parenthetical information (see the discussion in Larsen (2001) and example (4) *supra*) – it is not part of the main line of the narrative, but indicates that there was a truly massive amount of goods which the brigands could have taken away, but neglected because of the precious nature of the goods they did carry off. Put differently, the information marked by Δέ² is not crucial to the development of the narrative, but it provides a background to the crucial information in the μέν-δέ construction. The main line of the narrative is suspended syntactically in order to provide the information that these other goods were many and varied – the clause marked by Δέ² is not syntactically part of the narrative proper, but a syntactically separate, parenthetical clause which breaks up the antithetical μέν-δέ construction.

Examples (17)-(21) show that the contexts in which δέ can occur in my corpus of fourth-century texts at least partly overlap with those discussed by Bakker, Black and their predecessors. In fact, I will not attempt to disprove that an important part of δέ's function lies in indicating discontinuity – Bakker (1993) and Black (2002) have amply demonstrated that this is indeed the case. My aim will be to fine-tune Bakker's and Black's proposals, and to demonstrate how a relevance-theoretic framework can help us pinpoint δέ's exact meaning. As we will see, δέ indicates 'continuity-within-discontinuity' in terms of the contextual assumptions necessary to interpret the utterance it marks; as such, it can be distinguished from καί (which indicates 'integration', or continuity) on the one hand, and from ἀλλά (which indicates sharp discontinuity) on the other (see §3.2.3.5 *infra*). I borrow the notion of continuity-within-discontinuity from Schourup (2011), who argues that *now*, on its DM use, encodes discontinuity-within-discontinuity – by flipping the concept around, I want to emphasize that δέ retains an important link with the preceding context (see footnote 22 *infra*).

I will start, however, with the basics. Δέ is, at its core, discontinuous, as pointed out by Bakker and Black. It is not difficult to find examples in my corpus which bear this out almost explicitly:

(22) Οὗτος ἐπὶ Κωνσταντίου τοῦ πάνυ, κατὰ τὴν τότε δεδομένην ἐξουσίαν Χριστιανοῖς, δαιμόνωντι καθελὼν οἰκητήριον, καὶ πολλοὺς Χριστιανῶν ἀπὸ τῆς Ἑλληνικῆς πλάνης μεταστήσας εἰς σωτηρίαν οὐχ ἦττον διὰ τὴν τοῦ βίου λαμπρότητα ἢ τὴν τοῦ λόγου δύναμιν, ἣν μὲν ἐκ πλείονος ἐν ὀργῇ τοῖς Ἀρεθουσίοις, μᾶλλον δὲ Ἀρεθουσίων τοῖς φιλοδαίμοσιν. (Greg. *Iul.* I.617.3-617.9)

[Gregory is telling the story of Marcus, the bishop of Arethusa, who was brutally tortured by a crazed mob of ‘heathens’ in Arethusa:] “This man, in the time of the excellent Constantius, having, under the authority then granted to the Christians, pulled down a certain habitation of demons, and turned many Christians from the error of heathenism unto salvation, no less by the sanctity of his life than through the power of his preaching, had long been an object of hatred to the Arethusians, or rather [*de*] to the devil-worshippers among the Arethusians.”

(23) Διαταραχθεὶς δὲ πρὸς ταῦτα ὁ Ὑδάσπης «Ἄλλ’ οὐ συνίημι μὲν» ἔφη «τὴν πρὸς ἐναντία σου τῆς γνώμης μεταβολήν, ἀρτίως μὲν ὑπερασπίζεις τοῦ ξένου πειρωμένης νυνὶ δὲ ὡς πολεμίου τινὸς αὐτόχειρα γενέσθαι παρακαλούσης. (Hel. *Aeth.* 10.21.1.1-10.21.1.5)

[Chariclea has just asked her father Hydaspes if she could sacrifice Theagenes by her own hand, after having tried to convince him earlier to spare her lover:] “Deeply disturbed by her words, Hydaspes said: ‘I do not understand this reversal of your purpose. A moment ago [*men*] you were trying to shield this stranger; and now [*de*] you request that you may slay him with your own hand as an enemy.’”

(24) Πόσα μοι πράγματα παρεῖχες ἐν τοῖς κατόπιν λόγοις, ἀπαιτῶν τὴν αἰτίαν πῶς ἀόρατος ἡ γῆ [...]. Καὶ τάχα σοι οὐκ ἐδόκει αὐτάρκως ἔχειν τὰ εἰρημένα, ὅτι πρὸς ἡμᾶς τὸ ἀόρατον, οὐ πρὸς τὴν φύσιν εἶρητο, διὰ τὴν τοῦ ὕδατος ἐπιπρόσθησιν, ὃ τότε τὴν γῆν πᾶσαν περιεκάλυπτεν. Ἴδου νῦν ἄκουε αὐτῆς ἑαυτὴν τῆς Γραφῆς φανερούσης. Συναχθήτω τὰ ὕδατα, καὶ ὀφθήτω ἡ ξηρά. Συνέλκεται τὰ παραπετάσματα, ἵνα ἐμφανῆς γένηται ἡ τέως μὴ ὀρωμένη. Ἴσως δ’ ἂν τις κάκεῖνο πρὸς τούτοις ἐπιζητήσειε. [...] (Bas. *Hex.* IV.2.6-16)

[Basil is speaking to his audience – Genesis implies that the earth was, at first, invisible, and he aimed to explain this in his previous discourse.] “How many troubles you gave me in my previous discourses, asking me why the earth was invisible [...]. And, perhaps, the things I said did not appear sufficient to you – that the earth, without being naturally invisible, was so named to us, because of the mass of water that entirely covered it. Look now, hear how Scripture explains itself. ‘Let the waters be gathered

together, and let the dry land appear.’ The veil is lifted so that the earth, hitherto invisible, can be seen. Perhaps [*de*] someone will ask also the following, along with these questions. [...]”

In (22), μάλλον δέ marks the upcoming utterance as being a correction of the previous one. Not all Arethusians hated Marcus, but only the φιλοδαίμονες. As such, οἱ Ἀρεθούσιοι are replaced by the ‘devil-worshippers’ as Marcus’ haters, and there is hence a clear discontinuous value to the δέ-segment. (23) contains a μέν-δέ pair which contrasts Chariclea’s past behavior with the behavior she is displaying now – there is a discrepancy between the two, as Hydaspes points out, and, in that sense, an obvious discontinuity. In (24), finally, δέ signals a transition to ‘new questions’ and, as a consequence, the closing off of the previous πράγματα, which Basil dealt with in the previous paragraph and which he summarizes in the utterances leading up to the δέ-segment. So, even though these three examples are all discontinuous in quite distinct ways, they can all be considered to be discontinuous *in some respect* (see the quote from Black (2002: 144) above).

However, it is also obvious that there is a ‘continuous’ aspect to δέ. In examples like (22)-(24), this may be less clear¹⁵, but, in instances like the following, there is an overt sense of continuity attached to the δέ segment:

(25) Καὶ ἐπιστήσας ὀλίγον καὶ ψήφους τινὰς οὐδέν καταριθμούσας ἐπὶ δακτύλων συντιθεῖς τὴν τε κόμην διασεύσας καὶ τοὺς κατόχους μιμούμενος «ἐρᾶς» εἶπον «ὦ τέκνον.» Ἀνήλατο πρὸς τὴν μαντείαν, ὥς δὲ ὅτι «καὶ Χαρικλείας» προσέθηκα, τοῦτ’ ἐκεῖνο θεοκλυτεῖν με νομίσας μικροῦ μὲν καὶ προσεκύνει πεσών. (Hel. Aeth. 3.17.2.4-3.17.2.9)

[Calasiris knows that Theagenes is secretly in love with Theagenes. He is acting as if he is divining this:] “And after I had paused for a little while and had arranged on my fingers some counters that bore no numbers, and after I had tossed out my hair and imitated people possessed, I said ‘You are in love, my child’. He started up at my divination; when [*de*] I had added ‘With Chariclea’, he, thinking that these words were the very promptings of a god, prostrated himself before me having fallen to the ground.”

¹⁵ Although the continuity may not be obvious in (22)-(24), it is still there. For more on the continuity of μάλλον δέ as it occurs in (22), see §3.2.3.3 below; in (23), there is a contrast between two situations (one earlier, one now), but those situations both center around Chariclea’s attitude towards Theagenes. In (24), the new questions which Basil refers to arise from the information presented in the previous utterances. Anaphoric τούτοις and the focalizing καί (‘also’; merged with ἐκεῖνο via *crasis*) also point to continuity with the previous context (cf. *infra*).

(26) Τί γὰρ ἂν κωλύσειε καὶ ἡμᾶς τῷ βασιλεῖ κατὰ τὸ ἴσον ἀντιπαίζοντας Ῥωμαίων (ὥς δὲ ᾤετο, καὶ τῆς οἰκουμένης, ἡπατημένος τοῖς δαίμοσι) τὸν Εἰδωλιανὸν καλεῖν [...]. (Greg. *Iul.* I.604.11-14)

[Gregory is criticizing Julian's change in name for Christians which he enshrined in law – they were to be called 'Galileans'. He provides some ideas of his own for ridiculing Julian's name:] “For what should have hindered us too from joking in return with the emperor of the Romans (and as [*de*] he fancied himself, of all the world – deluded by the demons), and styling him 'Idolianus', [...].”

(27) Εἴ ποτε ἀπὸ ἀκρωρείας μεγάλης πεδίον εἶδες πολὺ τε καὶ ὕπτιον, ἡλίκαι μὲν σοι τῶν βοῶν κατεφάνη τὰ ζεύγη; πηλίκαι δὲ οἱ ἀροτῆρες αὐτοί; Εἰ μὴ μυρμίκων τινὰ σοι παρέσχον φαντασίαν; Εἰ δὲ καὶ ἀπὸ σκοπιᾶς ἐπὶ μέγα πέλαγος τετραμμένης τῇ θαλάσῃ τὰς ὄψεις ἐπέβαλες, ἡλίκαι μὲν σοι ἔδοξαν εἶναι τῶν νήσων αἱ μέγισται; πηλίκη δέ σοι κατεφάνη μία τῶν μυριοφόρων ὀλκάδων λευκοῖς ἰστίοις ὑπὲρ κυανῆς κοιμιζομένη θαλάσσης; Εἰ μὴ πάσης περιστερᾶς μικροτέραν σοι παρέσχετο τὴν φαντασίαν; (Bas. *Hex.* VI.9.43-52)

[Basil is discussing the relativity of sight – what is close by, appears bigger, and what is far off, appears smaller.] “If you have ever from the top of a high mountain looked at a large and level plain, how big did the yokes of oxen appear to you? And the ploughmen themselves? Did they not look like ants? If [*de*] also from the top of a commanding rock, looking over the wide sea, you cast your eyes over the vast extent, how big did the greatest islands appear to you? How large did one of those barks of great tonnage, which unfurl their white sails to the blue sea, appear to you? Did it not look smaller than any dove?”

(28) Ὁ γὰρ στρατὸς ἅπας, εἰ καὶ τοῦ παρόντος ἥττητο κράτους, ἀλλ' οὖν πλεῖον τῷ κατοικομένῳ νέμων αἰδοῦς (ἐπειδὴ καὶ πεφύκαμεν εὐνοώστεροί πως εἶναι τοῖς ἔτι προσφάτοις πάθεσι, τῷ φίλτρῳ προσπάσχοντες, καὶ τὸν ἔλεον τούτῳ προσάπτοντες), καὶ διὰ τοῦτο οὐκ ἀνεχόμενοι τὸ μὴ οὐχ ὥς βασιλέα τιμηθῆναι τοῦτον, καὶ προσδεχθῆναι πείθουσι τὸν ἀποστάτην, καὶ συναναγκάζουσιν ὑπαντῆσαι τῷ νεκρῷ μετὰ τοῦ προσήκοντος σχήματος· τὸ δὲ ἦν, ἀποκοσμήσαντα τὴν κεφαλὴν τοῦ διαδήματος, καὶ ὑποκύψαντα τῷ βασιλεῖ τὰ εἰκότα, οὕτως ἐπὶ τὸν τάφον συμπαραπέμψαι τοῖς ἄγουσι, καὶ τὸν αἰοίδιμον τῶν Ἀποστόλων σηκὸν, [...]. (Greg. *Iul.* II.687.26-39)

[Constantius II, Julian's predecessor, has died.] “[...] for the whole army, even though they submitted to the existing authority [i.e., to Julian, SZ], nevertheless paid more respect to the deceased, for the reason that, somehow or other, we are naturally inclined to sympathize more with fresh misfortune, mingling regret with our love, and adding compassion to the two. For this reason they could not endure that the departed one should not be honoured; and they persuade the apostate to receive him like an emperor, and compel him to go to meet the corpse in befitting form; that is [*de*],

stripping his brow of the diadem, and with head bent before his sovereign, as was right, thus to escort the corpse, in company with the bearers, to the tomb and to the famous Church of the Apostles, [...].”

(29) Παννύχιος γοῦν ἔκειτο, πυκνὰ μὲν πρὸς ἑκατέραν πλευρὰν τὸ σῶμα διαστρέφουσα πυκνὰ δὲ καὶ βύθιον ἐπιστένουσα. (Hel. Aeth. 7.9.3.1-3)

[Arsace is madly in love with Theagenes – it has all become a bit much and she is lying on her bed, inflamed by her passion:] “There she lay all night long, continually [*men*] turning over on this side and on that, and continually [*de*] sending forth heavy and deep groans.”

For example (25), the continuity is mostly syntactic – in the δέ segment, Calasiris adds an object (Χαρικλείας) to the verb ἐρᾷς (‘you are in love’) from the previous utterance. At least part of the utterance marked by δέ needs to be integrated into the syntactic frame established in the utterance preceding δέ; consequently, there is at least *some* continuity here. (26) is very similar – Gregory states that Julian is emperor of the Romans (Ῥωμαίων), and then follows this up with a biting addition in the δέ segment – Julian thought that he was also (καί, which can be used in a focalizing sense as ‘also’) emperor of the world (τῆς οἰκουμένης). Both Ῥωμαίων and τῆς οἰκουμένης are genitives which are syntactically dependent on τῷ βασιλεῖ. This means that there is obvious syntactic continuity between the utterance preceding δέ and the utterance marked by δέ. Of course, there is also clear discontinuity here – the addition of ὥς ᾤετο sets off Julian’s role as ‘emperor of the world’ as an assumption which Gregory does not share (but which, according to him, Julian held); his role as ‘emperor of the Romans’, on the other hand, is an objective fact. However, this fits in with my (for the time being, very vague) hypothesis that δέ indicates that the upcoming utterance is both discontinuous and continuous in some sense.

Example (27) is continuous in a more content-oriented sense, although there are both syntactic and lexical cues which point to continuity as well. The first question cited in (27) starts with εἰ, followed by an NP which points out the vantage point from which the scene is surveyed (ἀπὸ ἀκρωρείας μεγάλης) and the VP which provides information about the scene surveyed. The segment marked by δέ follows the same pattern: conditional εἰ, followed by an NP which specifies the vantage point (ἀπὸ σκοπιᾶς ἐπὶ μέγα πέλαγος τετραμμένης) and the VP which states what is being surveyed. In the δέ segment, δέ is followed by a focalizing καί (‘also’), which also points to some sort of inclusiveness between the two situations sketched in the two clauses. The point which Basil wants to make in the two clauses, is also identical – from a vantage point which is very high up, everything looks small. In the following utterance (not cited in (27)), Basil concludes that our sight is weakened if there is a large amount of air between our eyes and the object observed (ἐνδαπανηθεῖσα τῷ ἀέρι ἢ ὄψις). The two sentences cited here,

then, serve as input for an inferential process which leads to a single conclusion – namely, the greater the distance between our eyes and the object we are watching, the greater the amount of air between our eyes and that object, and the more our sight is weakened. In that sense, the utterance marked by δέ and the utterance preceding this utterance are quite similar.

In (28), δέ seems to mark a reformulation: the προσήκοντος σχήματος ('proper form') which Julian showed in greeting Constantius' corpse is filled in with the addition of the δέ segment. The τό which is located in first position in the δέ segment refers back to σχῆμα, and describes how this proper form is to be understood exactly – stripped of his diadem, and with bowed head. A reformulation which fills in a constituent of the previous utterance is, of course, continuous in at least the sense that it outlines how previous information should be taken. Example (29), finally, is continuous in perhaps the least straightforward way of the five instances discussed here, but it demonstrates both aspects of δέ (continuity and discontinuity) perfectly. The two assumptions marked by μὲν and δέ, respectively, communicate two separate things – one indicates that Arsace was turning over a lot, the other that she was groaning a lot. Yet these two assumptions have to be integrated into a larger, overarching context – namely, that of Arsace suffering under her desire to be with Theagenes. As such, there is continuity here as well – both assumptions have to be seen against the background of Arsace lying awake on her bed all night, thinking about Theagenes (note also that the same word, πυκνά ('continually'), is located in first position in both the μὲν and the δέ segments). I will discuss other similar examples later on (§3.2.3.4).

I will argue that δέ's function when it is not paired with a preceding μὲν does not diverge from its function when it does occur with μὲν, *pace* Bakker (1993). The only difference is that its function with μὲν is more pronounced in that it dovetails with μὲν's anticipatory function perfectly. However, even when it occurs on its own, δέ marks its utterance as being distinct, yet not wholly disconnected from the previous context. In (25), for instance, δέ marks an addition to the previous utterance; in (27), δέ marks an utterance which is distinct from, yet runs along the same lines as those established in the previous one.

Before proceeding to my analysis of δέ's semantics, I will first apply tests to check whether it is conceptual or procedural. Recall that, following De Saussure (2011), I will assume that an item is conceptual unless there is decisive evidence to the contrary.

3.2.2 Procedural or not?

There are some reasons to assume that δέ is procedural. The first is that its meaning seems inaccessible to consciousness. Of course, we have no access to native speaker intuitions for Ancient Greek, but earlier approaches to δέ's meaning seem to point to

trouble in getting at its exact meaning. In fact, most analyses describe its meaning in terms of its (discourse) function, and not in terms of its semantic meaning – in other words, there is no obvious answer to the question what δέ means. According to Bakker, δέ points to discontinuity, but he does not provide a ready-made translation; the same is true for Black’s ‘low- to mid-level discontinuity’, and Levinsohn’s and Larsen’s description of its function in terms of ‘change’. Denniston (and others) do provide a translation for δέ, but one of his options (‘but’) is procedural as well, and the other (‘and’) is problematic, as it applies more straightforwardly to καί.¹⁶ Another oft-used option is to leave δέ untranslated (Black 2002: 142), which does not help us at all. The authoritative LSJ dictionary, finally, does not provide a translation for δέ either – again, it is described in terms of what it does, whether that is ‘to introduce a proof’, ‘to begin a story’, ‘expressing opposition’ or ‘to resume after an interruption’ (s.v. δέ). This is not to say that translating conceptual items is easy, but even conceptual terms which are notoriously hard to pin down (such as λόγος) are provided with translations in the LSJ – as opposed to δέ, which is described operationally. Interestingly, the fifth-century lexicographer Hesychius does not discuss δέ, γάρ or οὖν in his exhaustive dictionary – although he does include items which he designates as σύνδεσμοι, such as δή, τοί and τοιγάρ. The only mention of any of the three DMs under consideration in this dissertation comes under Hesychius’ definition of δή, which he regards as synonymous with οὖν.¹⁷ This is not in any way to be construed as conclusive evidence that Hesychius had trouble translating δέ (or γάρ or οὖν), but it is an interesting *lacuna*.

Moving on to non-compositionality, it is clear that δέ can occur with other items which are commonly regarded as DMs. The question is whether they combine to form a larger representation.

(30) τί μηχανᾶται, καὶ τί ποιεῖ; Μιμεῖται Ῥαψάκην τὸν Ἀσσύριον· ἐστρατήγει δὲ ἄρα τῷ βασιλεῖ τῶν Ἀσσυρίων Σεναχηρείμ. (Greg. *Iul.* I.648.11-14)

[Gregory is recounting how Julian attempted to win over the Jews in Jerusalem:] “What does he plan, and what does he do? He follows the example of Rabshakeh the Assyrian – he was a general [*de ara*] of Sennacherib, king of the Assyrians.”

There are similar instances in Heliodorus – δέ is located in second position along with ἄρα in an utterance where a person who was just introduced is identified further (see *Hel. Aeth.* 4.16.3.9; 5.8.2.2). Although δέ and ἄρα occur together, there is no reason to

¹⁶ Additionally, some scholars have argued that *and* is at least partly procedural (cf. Moeschler 2016: 123; Mauri & van der Auwera 2012).

¹⁷ See Van Ophuijsen (1993: 141-151) for an in-depth discussion of δή’s semantics.

assume that they combine to fulfill a more complex function which they could not on their own – in (30), δέ still plays its normal role of indicating ‘continuity-within-discontinuity’ by marking an utterance which provides information about the previously introduced Rabshakeh (continuity), while also deviating from the main narrative line (discontinuity), in which Julian was compared to this Rabshakeh. Put differently, while the previous context is still relevant for the interpretation of the δέ segment, the δέ segment is also clearly discontinuous in that it is no longer concerned with Julian directly (note also the syntactic break – μιμείται is a present indicative, while ἐστρατήγει is an imperfect indicative). There is no reason to assume that this function changes due to the presence of ἄρα, which is usually taken to signal some sort of inference (Des Places 1929: 318; Sicking 1997: 173) or a comment by the speaker on the noteworthiness of the information she is presenting (Denniston 1954²: 33; Wakker 1997: 227).¹⁸ In (30), as in the examples in Heliodorus, it seems to work in this latter sense, identifying an interesting fact about the character under consideration. At any rate, there is nothing to suggest that δέ and ἄρα function differently in light of each other, and their presence can be explained by the meaning of the DMs on their own – this should be considered the preferred method of doing semantics if we follow Grice’s Modified Occam’s Razor.

(31) Ὅρῳ μὲν γὰρ ὑμᾶς δακρύοντας καὶ ἀνθρώπινόν τι πάθος ἀναδεδεγμένους καὶ ἐλεοῦντας μὲν τὴν ἁωρίαν τῆς κόρης ἐλεοῦντας δὲ καὶ τὴν ἐμοὶ μάτην προσδοκηθεῖσαν τοῦ γένους διαδοχὴν· ὅμως δ’ οὖν ἀνάγκη, καὶ ὑμῶν ἴσως μὴ βουλομένων, τῷ πατρίῳ πείθεσθαι νόμῳ, τῶν ἰδίων λυσιτελῶν τὸ τῆς πατρίδος ἐπίπροσθεν ποιούμενον. (Hel. Aeth. 10.16.5.1-6)

[Hydaspes, having been skeptical that Chariclea is his long-lost daughter, is finally convinced of the truth. However, his plan to sacrifice her to the Ethiopian gods, which dated from before he recognized her as his daughter, is still in place, as he himself confirms:] “I see you weeping and yielding to an impulse of human emotion in your pity for the untimely fate of this girl, and also in your pity for the frustration of my hopes for the succession; yet it is still [*de oun*] necessary, though it be perhaps against your will, that I obey our country’s law and set the claims of our fatherland above any personal advantage.”

In this instance, δέ occurs together with another DM under consideration in this dissertation, οὖν. However, there is again no reason to assume that they do not function

¹⁸ On a related note, it is high time that we get a more up-to-date analysis of ἄρα – see George (2015; *fc.*) for an intriguing deflationary proposal.

separately – δέ is balanced by the previous utterance, which is marked at its beginning by μέν. We get a concession here, marked clearly by the addition of ὅμως (usually translated as ‘nevertheless’ or ‘still’) in the δέ segment – the assumption in μέν could lead to the conclusion that Chariclea should not be sacrificed if it (a) provokes such an emotional response in the king’s retinue, and (b) cuts off the royal bloodline, but this conclusion is precluded by the δέ segment. In (31), then, δέ marks the suspension of an inference which could follow from the assumption in μέν – however, δέ as such only marks the assumption as being discontinuous against the background of the assumption in μέν, and the suspended inference is brought out by ὅμως (see Iten (2005: 179-183) on *although*, which is similar to ὅμως). As we will see, οὖν encodes the information that the assumption it marks is somehow mutually manifest already, i.e., is already part of the cognitive environment shared by the speaker and her audience. In this case, Hydaspes makes clear his intention to obey the laws (πείθεσθαι νόμῳ) and place his fatherland above his personal feelings (τῶν ἰδίων λυσιτελῶν τὸ τῆς πατρίδος ἐπίπροσθεν ποιούμενον) – but in the utterance preceding (31), Hydaspes had already stated that he intended to go through with sacrificing Chariclea (θεοῖς ἱεουργεῖν ὑπὲρ ὑμῶν ἐπείγομαι, or ‘I hasten to perform the rites for the gods on your account’ – Hel. *Aeth.* 10.16.4.8). As such, the assumption communicated in the segment marked by οὖν is already mutually manifest, based on what Hydaspes said before. As in (30), the DMs occur together, but function separately.¹⁹

(32) Ἄρκτος πολλάκις βαθυτάταις κατατρωθεῖσα πληγαῖς, ἑαυτὴν ἰατρεύει, πάσαις μηχαναῖς τῷ φλόμῳ τούτῳ ξηρὰν τὴν φύσιν ἔχοντι τὰς ὠτειλὰς παραβύουσα. Ἰδοὺς δ’ ἄν καὶ ἀλώπεκα τῷ δακρύῳ τῆς πίτυος ἑαυτὴν ἰωμένην. (Bas. *Hex.* IX.3.30-34)

[Basil argues that good Christians should take care of their souls, just as wild animals take care of themselves:] “The bear, which often gets severely wounded by very heavy blows, cares for himself and cleverly fills the wounds with mullein, a plant whose nature is very astringent. You could see [*de an*] the fox too heal his wounds with droppings from the pine tree.”

The DM ἄν marks the proposition as being either potential or unreal, i.e., as being non-real (the exact nature of that non-reality is specified by the mood and tense of the main verb – in this case, we get a potentialis) (Zakowski 2014d). Again, there is no reason to assume that δέ and ἄν combine to form a complex which is more than the sum of its parts – δέ marks the utterance as being discontinuous (the narrator transitions from a bear to a fox) but also continuous (the fox, like the bear, is presented as an

¹⁹ For more on the ὅμως δ’ οὖν construction, which occurs reasonably often in Heliodorus, see §5.2.4.1.

example of an animal which is able to take care of itself); ἄν marks the proposition as non-real.

(33) Καὶ ὑπεξελοῦσα τὸν Ἀρίστιππον ἔνθα προείρητο καταλαμβάνει, καὶ δεσμεῖν ἐπιστάντα τὸν μοιχὸν ἤπειγεν· ὁ δὲ εἶπετο καὶ ἐπιστὰς εἰστρέχει τε εἰς τὸ δωμάτιον καὶ τὴν κλίνην πρὸς μικρὰν τῆς σεληναίας αὐγὴν χαλεπῶς ἀνευρών «ἔχω σε» εἶπεν «ὦ θεοῖς ἐχθρά.» (Hel. *Aeth.* 1.17.3.4-9)

[Thisbe is plotting against her mistress Demaenete. She has convinced Demaenete to lay in bed and wait for the son of her husband, Aristippus – Demaenete is madly in love with her stepson. In fact, Thisbe goes to fetch Aristippus, tells him of Demaenete’s plan to cheat on him with an adulterer (whom she does not name) and leads him to the bedroom, acting as if the ‘adulterer’ is in bed with Demaenete:] “Thisbe slipped out, picked up Aristippus at the appointed place and incited him to bind the adulterer, who he would lie in wait for. He [*de*] followed her and suddenly dashed into the room. Making his way with some difficulty to the bed by a slight glimmer of the moon he said: ‘I have caught you, accursed woman!’”

Examples like (33) may seem to form the basis of a compelling case against the non-compositionality of δέ. As Bakker (1993: 293) points out, δέ had, by Homeric times, formed a collocation with the “unmarked anaphoric pronoun” ὁ (which eventually developed into the definite article). Without the addition of δέ, ὁ cannot occur as an anaphoric pronoun (as it does in (33)) – hence, δέ seems to form a larger representation with ὁ. However, two points should be made here. The first is that δέ still performs its usual function, i.e. marking continuity-within-discontinuity – in (33), it marks a shift in perspective to Aristippus, but the δέ segment still has to be seen against the backdrop of the previous utterance (Aristippus reacts to and follows Thisbe’s incitement to ‘surprise and bind the adulterer’). Bakker (*ibid.*) argues that this function harmonizes perfectly with switch-reference (or, in this case, perspectival discontinuity) – in other words, with a topic switch. As such, a constituent which marks a topic switch (ὁ) induces the use of δέ, while δέ is, of course, ideally suited to contexts containing a topic switch. But harmonization is not the same as composition, and the development of a collocation does not necessarily point to compositionality – there is no reason to suggest that δέ’s function is different in (33) than it is in, for example, (32). If anything, the function of ὁ changes (it cannot be used as a pronoun except with δέ), but that of δέ does not. The second point, then, is that δέ is still a marker in (33) and not itself compositional – compare (33) to Bezuidenhout’s examples in (52) in the previous chapter, where the DMs *but* and *so* were themselves the subject of a compositional process containing

conceptual items ('but, and this is a big but' ... 'so, although perhaps not obviously so'). This does not happen with *δέ*, even in examples like (33) – *δέ* does not combine with other elements, procedural or conceptual, to form a larger representation.²⁰

The same is true for *δέ*'s use in conjunction with *μέν*. As we will see, *μέν* encodes the information that the assumption it marks will be relevant for the interpretation of an upcoming segment (which is usually marked by *δέ*). But *δέ*'s function remains the same – it signals continuity-within-discontinuity, with the assumption marked by *μέν* being the backdrop against which the information in the *δέ* segment has to be interpreted. As such, the assumption marked by *μέν* amounts to the 'continuity' component of the continuity-within-discontinuity marked by *δέ* – but it is marked by *μέν*, and not *δέ*.

The conclusion here should be that *δέ* is non-compositional. It does occur with other DMs, and does induce a unique use of *ὁ*, but, in the first case, *δέ* and the other DM function independently; in the second case, *δέ* still fulfills its basic function of indicating continuity-within-discontinuity – it does not combine with *ὁ* to form a complex constituent, but modifies the interpretation of *ὁ*.

Rigidity and non-polysemy are also characteristic of procedural items. These properties, however, are more difficult to assess for a dead language, as I pointed out in the previous chapter. Rigidity means that there is no possibility for the meaning of *δέ* to be influenced by the context of the utterance. There are some examples where *δέ* seems to preclude an interpretation which seems more straightforward:

(34) οὐτε γὰρ πᾶσι τὰ αὐτὰ, οὐτε ἐνὶ τὰ πάντα, οὐτε τὸν αὐτὸν τρόπον, ὥς τοῖς παρ' ὑμῖν ἱεροφάνταις δοκεῖ, καὶ τοῖς τῶν θυσιῶν τεχνολόγοις. Ποῦ δὲ, ὥσπερ Λινδίοις, εὐσεβὲς τὸ καταρᾶσθαι τῷ Βουθοίῳ, καὶ τοῦτο εἶναι θεοῦ τιμὴν, τὰς εἰς αὐτὸν λοιδορίας; ἢ Ταύροις τὸ ξενοκτονεῖν, ἢ Λάκῳσι τὸ ἐπιβώμια ξαίνεσθαι, ἢ Φρυγῶν τὸ κατατέμνεσθαι ὑπ' αὐλῶν κηλουμένους; (Greg. *Iul.* I.640.1-8)

[Gregory is trying to draw a distinction between language and religion; at this point of his argument, he is demonstrating how there are many different sacrificial customs.] "Since all nations have not the same doctrines, nor any single one the sole possession of them; nor yet the same ceremonial, as it is laid down by your own sacred interpreters and directors of sacrifice. Where [*de*], as with the Lindians, is it a religious action to curse the Bull-eater, and is this a way of doing honour to the god, namely, the reviling of him? Or where, as with the Tauri, is it pious to sacrifice strangers; or as with the Laconians, to be flogged upon the altar? Or as with the Phrygians, to castrate yourself when bewitched by the sound of the flutes?"

²⁰ I will discuss the *ὁ δέ* collocation in more detail in §3.2.3.2.

In this case, we get an exemplification – the customs alluded to in the utterance preceding *δέ* are now given form by dint of an enumeration of strange, exotic ways of honoring the gods. As we will see, exemplifications are usually marked by *γάρ* (§4.2.3.3). Here, however, we get *δέ*, which points to a different inferential path for deriving positive cognitive effects – the upcoming utterance will noteworthily diverge from the previous one (we are transitioning to concrete examples of sacrificial customs), but the existing cognitive environment is still relevant as a background for interpreting the *δέ* segment (the *δέ* utterance should be interpreted against the assumption that there is great variety in religious doctrines, established in the utterance preceding *δέ*). Note also that the utterance which *δέ* marks is a question, as opposed to the preceding utterance, which is a statement – another factor which signals the discontinuity marked by *δέ*. As such, the utterance marked by *δέ* should not be taken as an exemplification, but as a separate segment which produces positive cognitive effects on its own, and takes the preceding context as a background for deriving those effects. In that sense, *δέ* forces a certain way of interpreting an utterance on the audience, and it compels that audience to construct an interpretation along the lines encoded by *δέ*. The following instance is similar:

(35) Προσετίθει δὲ κάκεινα, ὡς σφόδρα χρή προσδοκᾶν καὶ ἐπιβουλεύσειν τῇ Ἀρσάκῃ τὸν Ἀχαιμένην, ἄνδρα δοῦλον μὲν τὴν τύχην (ἀντίθετον δὲ ὡς ἐπίπαν τῷ κρατοῦντι τὸ κρατούμενον), ἀδικούμενον δὲ καὶ εἰς ὅρκους ἀθετούμενον [...]. (Hel. Aeth. 7.26.10.1-5)

[Arsace had planned to marry Chariclea off to Achaemenes, the son of her closest servant. Theagenes has managed to convince Arsace to call off the marriage, and is informing Chariclea of the good news.] “Theagenes further pointed out these things as well – that it was certainly necessary to anticipate that Achaemenes would even plot against Arsace, being a man of servile condition (inimical [*de*] in general is the subordinate to the master) and suffering injury too as the victim of a broken oath, [...]”

In (35), the underlined *δέ* marks an utterance which could be taken to be an explanation for why a ‘man of servile condition’ would plot against his master – *γάρ* is often used to mark utterances which explain the ‘general rule’ underlying a particular instance of that rule (e.g. Bas. Hex. VI.7.59; Greg. Iul. I.557.31; Hel. Aeth. 4.5.7.9). In this case, the ‘general rule’ is that slaves are inimical to their masters, and the ‘particular instance’ is that Achaemenes will probably plot against Arsace. In any case, *γάρ* could have conceivably been inserted here; instead, Heliodorus inserts a *δέ*, which leads the audience down a different inferential path. The general rule outlined in the *δέ* segment is discontinuous in the sense that it is not a reason for Achaemenes to plot against Arsace (instead, it outlines one of the reasons for his plotting), but it is still continuous in that it should be seen against the background of his plotting. In relevance-theoretic terms, it achieves positive cognitive effects on its own (i.e., not as a part of the previous

context, which deals with Achaemenes' plotting), but the derivation of those effects depends on the existing cognitive environment.

Of course, the notion of 'rigidity', especially for a dead language, is a largely subjective matter – for other scholars, (34) and (35) may not be evidence of δέ's rigidity because they have a different view of γάρ's function. For them, γάρ might not be expected at all in these instances. The problem here is that an analyst will always interpret a DM in light of his or her proposed function; as such, he or she will assume that its meaning is indeed rigid – that is, that problematic cases like (34) or (35) can be explained away by adjusting the context to fit the DM's proposed function. As such, rigidity is less an aspect of the DMs under consideration and more a methodological bias in doing research into 'dead' DMs. While I think rigidity is a useful tool for distinguishing procedural from conceptual meaning in living languages for which we have access to native speaker intuitions, it is much less straightforward to apply it to δέ, γάρ and οὖν (and dead languages in general). As a consequence, the question as to whether δέ is indeed rigid will probably have to remain open indefinitely. However, examples like (34) and (35) indicate that the boundaries between different DMs (or, at least, between δέ and γάρ) are not always clear-cut, and that an approach which only has recourse to coherence relations cannot distinguish between them adequately – δέ and γάρ can both mark explanations, as (35) demonstrates.

Non-polysemy, the final trait of procedural expressions, is not clear-cut either. Whether δέ is polysemous depends largely on the perspective you take – if, like me, you start from Modified Occam's Razor, you will probably find that every instance of δέ can be subsumed under a single meaning. On the other hand, Bakker (1993) seems to propose several distinct (yet related) functions for δέ – he is not explicit about whether he believes δέ is truly polysemous, but he seems to imply that he thinks it is at least polyfunctional. Bakker's approach seems to be contiguous to that espoused by e.g. Hansen (1998) – words have different senses which are related "as extensions from a prototype" (1998: 241). The point is that the framework taken has a large bearing on whether you think δέ is polysemous or not. However, I have already argued that the minimalistic approach which flows naturally from Modified Occam's Razor seems to be the most theory-neutral starting point for a semantic investigation, and I remain committed to that notion. Unless there is unambiguous evidence to the contrary, then, I will assume that δέ has a single distinct meaning.

In sum, there is reason to suggest that δέ is a procedural element. Rigidity and non-polysemy are difficult to ascertain for a dead language, but introspective inaccessibility and non-compositionality seem to be applicable and suffice to argue that, if δέ is not procedural, it is, at the very least, difficult to sketch in conceptual terms – indeed, I am not aware of any account which does not analyze its meaning in terms of what it does, and I have not come across any examples which even hint at compositionality. So, even

if $\delta\acute{\epsilon}$ is not conclusively procedural, the available evidence inclines me to believe that an analysis of its meaning should be developed along those lines.²¹

The next section will deal with $\delta\acute{\epsilon}$'s semantics in detail. I will discuss a range of examples which will demonstrate that $\delta\acute{\epsilon}$ marks contextual continuity-within-discontinuity. I will show that $\delta\acute{\epsilon}$ is often used with explicit, implicit and contextual cues which point to both continuity and discontinuity, and that, while its segment is always independent from the previous context, it also depends on contextual assumptions made available in that previous context. By looking at these examples, I will be able to refine Bakker's and Black's proposals for $\delta\acute{\epsilon}$'s meaning and propose a specific procedural rule which it encodes.

3.2.3 Towards a procedural rule for $\delta\acute{\epsilon}$

This section contains the meat of my analysis of $\delta\acute{\epsilon}$. I will discuss a wide range of contexts in which it occurs (§3.2.3.1) before discussing its so-called 'topicalizing' use (§3.2.3.2). I will then move on to some very specific contexts in which $\delta\acute{\epsilon}$ appears (namely, contexts which contain evidence for a certain assumption, and reformulations) and which form an insurmountable obstacle for a comprehensive coherence approach to an analysis of its meaning. Before describing the procedural rule which $\delta\acute{\epsilon}$ encodes and locating it in the larger ecology of Ancient Greek coordination, I turn to those instances where $\delta\acute{\epsilon}$ co-occurs with anticipatory $\mu\acute{\epsilon}\nu$ (§3.2.3.4).

3.2.3.1 Building an account from the ground up: on discontinuity and continuity

We have already seen that $\delta\acute{\epsilon}$ does not occur in either purely continuous or discontinuous contexts. In this section, I will develop this idea further, and argue that there are several clues which show that $\delta\acute{\epsilon}$ is continuous in terms of context selection

²¹ As to whether $\delta\acute{\epsilon}$ is truth-conditional, the answer will probably be 'no'. I say 'probably' because $\delta\acute{\epsilon}$ can, in some (or even most) contexts be considered to be equivalent to English *and* (i.e., &), which is truth-functional and, as Rouchota (1990: 72) points out, "makes a contribution to the truth conditional content". However, the question is whether $\delta\acute{\epsilon}$ makes the same contribution as & does – or whether we should paint its meaning in different terms, with the & reading following from the interaction of $\delta\acute{\epsilon}$'s meaning and certain contexts. As we will see (§3.2.3.5), $\kappa\alpha\iota$ is a much more straightforward candidate for Ancient Greek's *and* (&) counterpart. I will attempt to demonstrate that $\delta\acute{\epsilon}$'s meaning has more to do with maintaining continuity of contextual assumptions and separating assumptions, in which case its function cannot be analyzed along truth-functional lines.

(the preceding contextual assumption are relevant for its interpretation), and discontinuous in that its utterance communicates a separate assumption.²²

Most straightforwardly, δέ often occurs with additions:

(36) τοὺς δὲ θεραπευτὰς τῶν φυτῶν ἐμβάλλοντας τοῖς κλάδοις, οἷόν τινα σπέρματα τῶν ἀρρένων, τοὺς λεγομένους ψῆνας, καὶ οὕτως οἷον ἐν συναισθήσει τῆς ἀπολαύσεως γίνεσθαι καὶ ἀνορθοῦσθαι πάλιν τοὺς κλάδους, καὶ πρὸς τὸ οἰκεῖον σχῆμα τοῦ φυτοῦ τὴν κόμην ἀποκαθίστασθαι. Τὰ αὐτὰ δὲ ταῦτα καὶ περὶ τῶν συκῶν φασιν. (Bas. Hex. V.7.42-8)

“Those who take care of these plants shake over these palms some fertilizing dust from the male palm-tree, the psen as they call it: and so the tree appears, as it were, to share the pleasures of enjoyment; and it raises its branches again, and its foliage resumes its usual form. These same [*de*] things they say also of the fig tree.”

(37) εἶναι γὰρ τοῦ ἡμετέρου νόμου μήτε ἀμύνεσθαι, μήτε δικάζεσθαι, μήτε κεκτῆσθαι τι τὴν ἀρχὴν, μήτε νομίζειν ἴδιόν τι· ἀλλὰ ζῆν ἐτέρωθι, καὶ τῶν παρόντων καταφρονεῖν ὥς οὐκ ὄντων· κακοῦ δὲ μὴ ἀντιδιδόναι, μηδὲ ἐξεῖναι, κακόν· μηδὲ τὴν παρειὰν παιομένους φεῖδεσθαι τῆς ἐτέρας, ἀλλὰ καὶ ταύτην ἐμπαρέχειν τῷ παίοντι, καὶ τὸν χιτῶνα τῷ ἱματίῳ προσapoδύεσθαι. Προσθήσει δὲ ἴσως, ὅτι καὶ ὑπερεύχεσθαι τῶν ἀδικούντων, καὶ τὰ κάλλιστα βούλεσθαι τοῖς διώκουσι. (Greg. Iul. I.632.10-19)

[Gregory is playing out Julian's argument against the Christians:] “[He said] that it was part of our religion neither to resist injury nor to go to law, nor to possess anything in the way of power, nor to consider anything one's own, but to live in the other world, and to despise things present as though they were not; that it was also not lawful for anyone to return evil for evil; and not, when they are smitten on the one cheek, to spare the other, but to also offer the other to the one who smites; and to be stripped of the coat after the cloak. And he will add [*de*] perhaps that it is also part of our religion to pray for those that injure us, and wish the best to our persecutors.”

(38) «ὦ Κνήμων» ἐβόησεν «ὥς με ἀπολώλεκας· προσηδίκησας δὲ καὶ Χαρίκλειαν τῆς ἡδίστης αὐτὴν κοινωνίας ἤδη δεύτερον ἀποστερήσας.» (Hel. Aeth. 2.5.1.2-4)

[Theagenes thinks he has found the body of Chariclea. He wants to kill himself, but Cnemon had secretly removed his sword from his scabbard. Theagenes now notices this:] “Theagenes cried out, ‘Cnemon, how you have destroyed me! And besides you

²² As stated above, I choose to flip Schourup's discontinuity-within-continuity around. I think δέ indicates that the upcoming utterance is basically discontinuous, but that this discontinuity is mitigated by contextual continuity. ‘Continuity-within-discontinuity’ expresses this idea better than ‘discontinuity-within-continuity’ does, to my mind.

have done injury [*de*] to Chariclea as well, having deprived her of her greatest pleasure, our companionship, for the second time now.”

In all three instances above, explicit reference is made to the context established in the previous utterance, and the narrator points out that (elements of) the *δέ* segment have to be incorporated in (i.e., added to) the context established in the previous utterance(s). In (36), another variable is added to the previous context (the fig trees develop along the same lines as the palm; note the focalizing *καί* ‘also’), which signals inclusiveness, and *τὰ αὐτά*, which means ‘the same things’ – i.e., the same things as were made explicit in the previous utterance). In (37), *προσθήσει* literally means ‘he will add’ – Gregory imagines that Julian would add the information in the *δέ* segment to the previous context. The previous utterance dealt with how Christians ‘turn the other cheek’, while the *δέ* segment deals with how Christians retain positive feelings even towards those who do them wrong. In (37), then, *δέ* adds another element to the list of assumptions Julian has about Christians’ peaceful ways. (38) is additive as well – *προσαδικέω* means ‘to wrong another person besides’, with the prefix *προσ-* pointing to the additive value of the verb. Theagenes here cries out that Cnemon has not only done him harm (by taking away his sword), but that he has also (note again the focalizing *καί*) done Chariclea harm. Chariclea hence has to be added to the context established by the previous utterance – there, Theagenes argued that Cnemon had done him harm; here, he argues that Cnemon has also done Chariclea harm.

In all three cases above, then, the *δέ* segment achieves relevance (i.e., yields positive cognitive effects) on its own, as a separate utterance; at the same time, the previous utterance functions as the context which helps establish that relevance. In (36), the *δέ* utterance cannot be interpreted correctly without having recourse to the preceding utterance; in (37), the *δέ* utterance has to be added to the previous ones as dealing with Julian’s assumptions about the non-violent nature of Christians; in (38), Cnemon does both Theagenes and Chariclea harm in different ways by preventing Theagenes from killing himself.

There are also examples which are additional in a more syntactic sense. We have already seen two of these in (25) and (26), and (39) is another one:

(39) ἡμῶν γε πάντως συνετωτέρω, καὶ ἄγοντι τὸ οἰκεῖον ὅπη καὶ ὅπως βούλεται· πάντως δὲ πρὸς τὸ κρεῖττον καὶ τὴν ἰατρείαν, κἂν οἱ θεραπευόμενοι δυσχεραίνωσιν. (Greg. *Iul.* I.572.12-15)

[Gregory is praising God:] “[...] Who is in all respects wiser than ourselves, Who guides His own whither and in what manner it pleases Him – entirely [*de*] towards their good, and healing, even though those that are being healed, are displeased.”

Here, πρὸς τὸ κρεῖττον καὶ τὴν ἰατρείαν specify towards what God is leading (ἄγοντι) his flock – as such, it belongs to the previous clause syntactically, and provides an answer to ὅπη (‘whither’). The δέ segment contains a specification of the previous utterance, but yields positive cognitive effects on its own – God’s ability to lead his flock where he wants to, and his decision to lead them towards ‘good’ and ‘healing’, are to be taken separately. God, in all his greatness, could have led his believers to doom, but, in all his goodness, chose to lead them down a path of good.

There are other examples which present explicit continuity-within-discontinuity where δέ occurs:

(40) Ἀλλὰ θῆγε τὸ φρόνημα καὶ πρὸς τὸ ἀνδρειότερον ὄρθου τὴν γνώμην· τὸ μὲν γὰρ παρὸν ἀναγκαῖον δοκεῖ οὕτω συντίθεσθαι τοῦ μή τινα τοῦ δρασμοῦ λαβεῖν αὐτὸν ὑπόνοιαν, καὶ συμπορεύεσθαι τὴν πρώτην, δέος δὲ δήπουθεν οὐδὲν ἀνόπλῳ τὴν χεῖρα ξυνιέναι ξιφήρη καὶ πεφραγμένον αὐτόν, καιροῦ δὲ λαβόμενον ἐγκαταλεῖψαι διαλαθόντα καὶ ἥκειν παρ’ ἡμᾶς οὔπερ ἂν συνθώμεθα· συνθώμεθα δέ, εἰ δοκεῖ, κώμην τινὰ πλησίον, εἴ πη γινώσκεις ἡμέρον.» (Hel. Aeth. 2.18.4.1-9)

[Theagenes is trying to convince Cnemon to leave with Thermouthis, one of the brigands who had kidnapped Theagenes and Chariclea. He wants Cnemon to do this so that he himself can flee with Chariclea:] “But pluck up your spirits and fix your mind to a braver course; for at this time it seems necessary to consent, that he may conceive no suspicion of our intended flight, and first go with him,— there is no danger for him who has a sword and is on his guard to go with one utterly unarmed — and then, if occasion serve, slip from him unnoticed and come to us at a place which we will agree on. Let us agree [*de*], if it seems right to you, on some village nearby, if you know a civilized one somewhere.”

The δέ segment begins with the exact same word with which the previous utterance ended (συνθώμεθα). In the utterance preceding δέ, Theagenes had devised a plan in which he and Chariclea would meet up with Cnemon if the latter was able to shake Thermouthis. In the δέ utterance, Theagenes then proceeds to suggest a village nearby, and asks Cnemon whether he knows of a suitable one. The important point here is that the δέ segment builds on the promise made in the preceding utterance, which hence provides necessary background assumptions for the interpretation of the δέ utterance. Again, the δέ segment achieves relevance on its own, transitioning from the presentation of Theagenes’ plan to an adhortative subjunctive asking Cnemon to help think of a place where they would be able to meet up. However, for Theagenes and Cnemon to agree on a spot, Theagenes’ plan in the utterance preceding δέ has to be accepted. As such, the δέ segment can only yield positive cognitive effects if the previous utterance had already produced positive cognitive effects for Cnemon, i.e., if he had already accepted Theagenes’ plan. In this way, the utterance preceding δέ

functions as a background assumption for the interpretation of the δέ utterance, and contextual continuity is maintained as well.

There are very similar instances when δέ occurs with ἐπεί, ἐπειδή or ὥς ('after', 'when'):

(41) αὐτὸς δὲ δι' ἄλλης ὁδοῦ εὐπορωτέρας τε καὶ ἀσφαλεστέρας, ἧς ἐγὼ σοι καθηγητῆς (ἔμπειρος δὲ εἴ τις ἄλλος φημί τῆς χώρας εἶναι τῆς Περσικῆς), ἐμβαλεῖς τε εἰς τὴν πολεμίαν, καὶ τῶν κατὰ γνώμην τυχῶν ἐπανήξεις· ἡμᾶς δὲ τηνικαῦτα εὖ ποιήσεις, ἡνίκα ἂν ἔργῳ πεῖραν λάβῃς τῆς ἡμετέρας εὐνοίας καὶ παραινέσεως. Ὡς δὲ εἶπε ταῦτα, καὶ εἰπὼν ἔπεισεν, εὖπιστον γὰρ ἡ κουφότης, καὶ τοῦ Θεοῦ μάλιστα συνελαύνοντος, ἅπαντα ἦν ὁμοῦ τὰ δεινά. (Greg. *Iul.* II.677.29-39)

[Julian has embarked on his expedition against the Persians. He meets with a Persian who tries to convince him that Julian should split his army in two and that the emperor, with one part of his army, should take a safer route than he had planned to take:] “You [i.e., Julian, SZ] yourself will take another route, better supplied and safer; along which I will be your guide (being acquainted with the country as well, I say, as any man of the Persian lands), and will cause you to enter into the heart of the enemy's country, where you can obtain whatever you please, and so make your way home; and us you shall then recompense, when you have actually made proof of my good will and good advice.’ And when [*de*] he had said this, and gained credence to his story (for credulous is relief, especially when God drives it on), everything that was dreadful happened at once.”

(42) «Πίστευε» εἶπεν, «ἄλλ' ἐπόμνυε καὶ αὐτὸς ἢ μὴν ἄριστα χρῆσθαι τῷ δώρῳ καὶ ὥς ἂν αὐτὸς ὑφηγήσωμαι.» Ἐθαύμαζον μὲν ἀπορῶν ἐπώμνυον δὲ τηνικαῦτα ἐλπίζων. Ἐπειδὴ δὲ μοι ὠμώμοστο ὥς ἐκεῖνος ἐπέσκηπτεν, ἄγει με παρ' ἑαυτὸν καὶ δείκνυσι κόρην ἀμήχανόν τι καὶ δαιμόνιον κάλλος. (Hel. *Aeth.* 2.30.5.5-2.30.6.3)

[Calasiris is approached by a man who offers him valuable gemstones as a gift if he wants to accept in addition (πρὸς τούτοις) another gift (καὶ ἕτερον δῶρον) which is even more valuable (πολὺν τούτων ἐριτιμότερον). Calasiris laughs, as he thinks the man isn't being serious. The man reacts:] “Only trust me’, he said. ‘Come, swear that you on your part too will make the best use of my gift and in the way which I myself shall indicate to you.’ Surprised and bewildered, I swore to this, in the hope of acquiring such fine things. When [*de*] I had taken the oaths in the terms that he required, he took me to his house and showed me a girl of inconceivable, celestial beauty.”

(43) «πορεύομαι νῦν ὥς αὐτήν» ἔλεγεν· «εἰ δέ σοι φίλον, συμπροθυμήθητι καὶ μή τι πρὸς τῆς ὀχλικῆς ἀηδίας ἐπιτέτριπται συνεπίσκεψαι.» Χαίρων μὲν ἐπένευον ἐνεδεικνύμεν δὲ ὥς ἀσχολίας ἄλλης προϋργιαίτερον τίθεμαι τὸ κατ' αὐτόν. Ἐπεὶ δὲ παρεγενόμεθα οὗ κατήγετο, καταλαμβάνομεν εἰσελθόντες ἐπὶ τῆς εὐνῆς ἀλύουσιν καὶ τοὺς ὀφθαλμοὺς τῷ ἔρωτι διαβρόχους. (Hel. *Aeth.* 3.6.4.3-3.7.1.3)

[Charicles, the adoptive father of Chariclea, thinks Chariclea is indisposed because of the crowd at the procession in Delphi in which she participated. What he doesn't realize, is that she fell in love with Theagenes the moment she saw him at the procession, and that her secret infatuation has felled her:] "Charicles said [to Calasiris], 'I am going to her now: if you like, come, share my solicitude and my observation as to any unpleasantness from the crowd that may have discomposed her.' I gladly nodded my assent, and made it clear to him that I accounted no other business so important to me as his. When [δε] we arrived at her dwelling, we entered and found her lying listless on her bed, with her eyes all bedewed with love."

In all three instances, the previous context is explicitly taken up again in the subordinate clause introduced by ὥς, ἐπειδὴ and ἐπεὶ. In (41), the ὥς clause refers back to the words of the Persian which were presented in the previous utterances; in (42), the oath which Calasiris just swore to, is taken up again; in (43), the utterance preceding δέ conveyed Calasiris' acceptance of Charicles' proposal to join him in visiting Chariclea – the ἐπεὶ clause amounts to a temporal step forward which is based on the information that Charicles and Calasiris will visit Chariclea. In these cases, then, the preceding context is to be regarded as the 'springboard' from which the information in the main clause of the δέ utterance 'launches' – or, in less metaphorical terms, the background against which the information in the main clause of the δέ utterance achieves relevance. To that end, the information communicated in the preceding utterance is recapped in a temporal subclause preceding this new information in the main clause.²³

(41)-(43), as such, are composed of both continuous and discontinuous material, divided among the subordinate clause and the main clause respectively. More than that, the continuous material is to be taken as the basis on which the main clause builds, and hence as background material relevant for the interpretation of the main clause. As in (37)-(39), the δέ segments achieve positive cognitive effects on their own. Julian cannot accept the Persian's proposal until it has achieved positive cognitive effects (i.e., until the previous utterance is interpreted fully, with all necessary implicatures derived as well) – in that sense, the δέ segment is a separate step which is based on the previous one. The same is true for (42): Calasiris would not have been led to the man's house until he had sworn the oath in the utterance preceding δέ. Again, the δέ utterance yields positive cognitive effects on its own, as a next step following from the previous one. (43) is very similar – Calasiris will only join Charicles in visiting Chariclea on the basis of the assumptions communicated in the previous utterances, i.e., on the basis of his assent to

²³ For other, similar examples, see e.g. Greg. *Iul.* I.541.26, I.588.25, II.668.24 and II.685.16; Hel. *Aeth.* 1.11.2.2, 1.17.2.1, 1.19.2.1, 2.3.3.3, 2.35.4.3, 3.10.2.6, 7.11.2.1, 7.24.3.5, 8.12.4.6, 9.6.1.1 and 10.32.1.1.

Charicles' proposal to join him. Again, δέ clearly marks a step which follows from previous ones which have already been accepted. Note that 'accepted' is double-pronged here – not only do the characters in the story have to accept others' proposals (or swear an oath in (42)) before proceeding to the step outlined in the δέ segment, but Gregory's and Heliodorus' audience also have to fully determine the author-intended interpretation of the utterance preceding δέ before proceeding to the δέ segment. The assumptions provided in the preceding utterances function as the cognitive environment for interpreting the δέ segment – in that sense, those assumptions have to be mutually manifest and primed to be applied to the interpretation of the δέ utterance.

There are many other examples of δέ marking an utterance which clearly look back to a previous utterance:

(44) Οἱ γὰρ κατὰ τὴν ἄκατον ἕως μὲν ἡμῖν ὁ πλοῦς ὑπήνεμος ἠνύετο μακρῶ τῆς ὀλκάδος ὡς τὸ εἶκος ὑπελείποντο μείζοσι τοῖς ἰστίοις πλέον τὸ πνεῦμα δεχομένης· ἐπειδὴ δὲ τὴν θάλασσαν ἐστόρεσεν ἡ γαλήνη καὶ τὰς κώπας ἡ χρεία παρεκάλει, θᾶττον ἡμῖν ἢ ὥστε εἰπεῖν ἐπέστησαν ἅτε οἶμαι πρόσκωποί τε πάντες οἱ ἐμπλέοντες καὶ κοῦφον ἀκάτιον καὶ πρὸς εἰρεσίαν εὐπειθέστερον ἐλαύνοντες. Ἦδη δὲ πλησιαζόντων ἀνέκραγέ τις τῶν συνεμβεβηκότων ἀπὸ τῆς Ζακυνθίων «Τοῦτο ἐκεῖνο, ἄνδρες, ἀπολώλαμεν· πειρατικὸς ὁ στόλος, Τραχίνου γνωρίζω τὴν ἄκατον.» (Hel. Aeth. 5.23.3.1-5.24.1.4)

[A Phoenician ship on which Theagenes, Chariclea and Calasiris are being transported, is being followed by what they assume to be a pirate barque.] “Those that were in the barque, as long as we had wind, were left far behind our merchant ship, our greater sails, as is natural, receiving more wind. But when the sea grew calm and necessity called us to row, the barque came upon us quicker than I can describe, for every one on board her, I think, was at the oars, while she was a light boat and answered better to the rowers' efforts. When [*de*] they were now close to us, one of the men of Zacynthus who had come aboard with us cried: ‘This here, comrades, means the end of us; this is a pirate craft. I recognize Trachinus' barque.’”

This example is translated almost identically to the ones in (41)-(43), but is syntactically different. The temporal subordinate clause is replaced by a genitive absolute (πλησιαζόντων), which takes up an assumption introduced in the previous utterance – more quickly than Calasiris can describe, the pirates came closer (θᾶττον ἡμῖν ἢ ὥστε εἰπεῖν ἐπέστησαν). In light of this assumption, the genitive absolute (‘when they had come closer’) follows naturally – if the pirates approach very quickly, the fact that they have approached the merchant ship is to be expected. In other words, the δέ utterance again takes the previous context as the basis on which to present the new information (the outcry by the man from Zacynthus, who warns the passengers of the pirates' approach and the identity of their leader). The previous context functions as the background against which the information communicated in δέ has to be interpreted,

but this new information (presented in the main clause) is also separate from the previous context – more specifically, it consists of the Zacynthian’s reaction to assumptions which are highly active in the cognitive environment of Heliodorus’ audience. These assumptions are, in this case, played out in the genitive absolute – we already knew that the pirates were approaching (i.e., this assumption was present in the cognitive environment shared by Heliodorus and his audience), but, with the genitive absolute, they have now come very close to the merchant ship. The genitive absolute precedes the main clause as a contextual frame of interpretation – that is, as a contextual assumption which provides the background for interpreting the main clause (cf. also Dik 2007: 37; Bakker 1993: 293-4). As with the subordinate and the main clause in (41)-(43), both the genitive absolute and the main clause fall under δέ’s scope, and there is hence a clear continuity and discontinuity to the information δέ marks.

(45) Ἐντεῦθεν δὲ ἤδη, ὥσπερ ψάμμου ποδῶν ὑποσπασθείσης, ἢ νηϊ ζάλης ἀντιπεσοῦσης, εἰς τοῦπίσω χωρεῖ τὰ πράγματα. Ἡ γὰρ Κτησιφῶν φρούριόν ἐστι καρτερόν καὶ δυσάλωτον, τείχει τε ὀπτῆς πλίνθου, καὶ τάφρῳ βαθείᾳ, καὶ τοῖς ἐκ τοῦ ποταμοῦ τενάγῃσιν ὠχυρωμένη. Ποιεῖ δὲ αὐτὴν ὀχυροτέραν καὶ φρούριον ἕτερον, ᾧ προσηγορία Κωχή, μετὰ τῆς ἴσης ἀσφαλείας συγκείμενον, ὅση τε φυσικὴ καὶ ὅση χειροποίητος, τοσοῦτον ἐνούμενον, ὥς μίαν πόλιν δοκεῖν ἀμφοτέρας, τῷ ποταμῷ μέσῳ διειργομένας ταύτας. (Greg. *Iul.* II.676.24-34)

[Julian is assaulting the Persian city of Ctesiphon:] “From this point, however, like sand slipping from beneath the feet, or a great wave bursting upon a ship, things began to go back with him; for Ctesiphon is a strong fortified town, hard to take, and very well secured by a wall of burnt brick, a deep ditch, and the swamps coming from the river. It is rendered [*de*] yet more secure by another strong place as well, the name of which is Coche, furnished with equal defences as far as regards both its natural location and its artificial protection – so closely united with it that they appear one city, the river separating both, between them.”

In (45), there are several elements which point to continuity – focalizing καί (‘also’), anaphoric αὐτήν, and, above all, ἕτερον and ὀχυροτέραν. The adjective ἕτερος (‘other’) always encodes a binary opposition – there is one other element to be contrasted with the one marked by ἕτερος.²⁴ In this case, that element is the φρούριόν (‘fort’) mentioned in the preceding utterance (Ἡ γὰρ Κτησιφῶν φρούριόν) – Ctesiphon is a fort by itself, and it is also made stronger (ὀχυροτέραν) by another fortification, namely, the town of Coche. The link between the utterance marked by δέ and the previous one is, then,

²⁴ For a non-binary use of ‘other’, Ancient Greek employs ἄλλος.

compounded by the comparative ὀχυροτέραν, which signals that its utterance contains information which will add to the strength of Ctesiphon as it was presented in the preceding utterance. The ‘other fort’ (φρούριον ἕτερον) is added to the previous context, which had already established Ctesiphon as a seemingly impregnable fortress. Put differently, the previous context is maintained as a background, but another variable is added to it (Coche), which in turn changes the audience’s assumptions about Ctesiphon – there are, in fact, two fortresses which are part of any siege which takes Ctesiphon as its target. The second one strengthens the first one, according to Gregory; as such, the utterance marked by δέ takes the previous assumption (that Ctesiphon is a strong fortress) as a background, and achieves positive cognitive effects as an assumption which strengthens an existing one. In that sense, δέ still communicates a separate assumption, but it leads to the same conclusion as the previous utterance – taken together, the conclusion that Ctesiphon is difficult to take is stronger than it would be if either the δέ segment or the preceding segment were communicated on their own (see Blakemore & Carston (2005: 575) on *and*). Put differently, the δέ segment strengthens an existing assumption – one of the three types of positive cognitive effects which a relevant assumption can yield according to RT (§2.3.1.2).

The important point here is that the δέ utterance, in all of the instances discussed in this chapter, communicates a separate assumption, as it does in (46):

(46) Ὅταν ἴδῃς τὰ ἔντομα λεγόμενα τῶν πτηνῶν, οἷον μελίσσας καὶ σφήκας (οὕτω γὰρ αὐτὰ προσειρήκασιν διὰ τὸ πανταχόθεν ἐντομάς τινας φαίνειν), ἐνθυμοῦ, ὅτι τούτοις ἀναπνοὴ οὐκ ἔστιν, οὐδὲ πνεύμων, ἀλλ’ ὅλα δι’ ὅλων τρέφεται τῷ ἀέρι. Διόπερ καὶ ἐλαίῳ καταβραχέντα φθείρεται, τῶν πόρων ἀποφραγέντων· ὅξους δὲ εὐθὺς ἐπιβληθέντος πάλιν ἀναβιώσκειται, τῶν διεξόδων ἀνοιγομένων. (Bas. Hex. VIII.7.67-73)

“When you see flying creatures called insects (τὰ ἔντομα), like bees and wasps (because they have incisions (ἐντομάς) all around), reflect that they have neither respiration nor lungs, but that they are supported by air through all parts of their bodies. Thus they also perish, if they are covered with oil, because it stops up their pores. If smeared immediately with vinegar [*de*], they return to life, as the pores have reopened.”

In this case, there is again obvious continuity – the δέ utterance assumes that the insects are still covered with oil, and, from there, provides a remedy for their seemingly perished state. There is also a clear discontinuity in that the δέ segment describes a transition from the previous situation to the new lease of life given to insects when the oil covering them is washed off with vinegar. As such, this δέ segment is more akin to the ones in (41)-(44) than (45) – contextual assumptions derived from the preceding utterances form the background against which this separate utterance achieves positive cognitive effects. The previously communicated assumption (insects covered with oil

die) is the starting point for the δέ segment (oil-covered insects recover when washed with vinegar), but the δέ segment outlines how the arrival of death described in the previous utterance can be put off. There is, then, continuity in terms of the contextual assumptions underlying the interpretation of the δέ utterance, but also discontinuity in that the δέ utterance describes how the previous context can be canceled out (i.e., how insects can be brought back from the brink of death). There are other δέ examples which are similar to (46) in that they are less explicitly continuous – but these still rely on the existing context as the basis of the speaker-intended interpretation:

(47) Τούτων εἰρημένων ἐπαινοῦντο τὴν λίμνην καὶ χωρισθέντες ἀλλήλων ὁ μὲν εἰς τὴν Χέμμιν ὁ Ναυσικλῆς ἔχων τὴν Χαρίκλειαν ἔρχεται, Μιτράνης δὲ ἐπὶ ἐτέρας κώμας τῶν ὑπηκόων ἐκτραπεῖς οὐδὲν ὑπερθέμενος ἅμα γράμμασι τὸν Θεαγένην πρὸς Ὀροονδάτην ὄντα κατὰ τὴν Μέμφιν ἐξέπεμψεν. Εἶχε δὲ ὧδε τὰ ἐπεσταλμένα· «Ὀροονδάτη σατράπη Μιτράνης φρούραρχος· Ἕλληνα νεανίσκον, ὑπεραίροντα τὴν ἐμὴν δεσποτείαν καὶ θεῷ βασιλεῖ τῷ μεγίστῳ μόνῳ καὶ φαίνεσθαι καὶ διακονεῖσθαι ἄξιον, [...]. (Hel. Aeth. 5.9.1.1-5.9.2.4)

[Theagenes and Chariclea have been captured by Mitranes, the deputy of Oroondates.] “This said, they rowed over the water and departed one from the other. Nausicles having Chariclea with him came to Chemmis; but Mitranes, going to view another town under his jurisdiction, without delay sent Theagenes with a letter to Oroondates, who was then at Memphis. It had [*de*] the following message:

‘Mitranes the captain to the governor Oroondates,

[I send you] a young man of Greece, too good to serve under me and worthy only to appear and wait in the sight of our god, the great king; [...].”

(48) «Τὰ γνωρίσματα» ἔφη «τοῖς γινώσκουσιν αὐτὰ ἢ συνεκθεμένοις ἐστὶ γνωρίσματα, τοῖς δὲ ἀγνοοῦσιν ἢ μὴ πάντα γνωρίζειν ἔχουσι κειμήλια τὴν ἄλλως καὶ ὅρμοι κλοπῆς, ἂν οὕτω τύχη, καὶ ληστείας τοῖς φέρουσιν ὑπόνοιαν προσάπτοντες. Εἰ δὲ δὴ τι καὶ γνωρίσειεν Ὑδάσπης, τίς ὅτι καὶ Περσίννα ἢ δεδωκυῖα, τίς δὲ ὅτι καὶ ὡς θυγατρὶ μήτηρ ὁ πείσων ἔνεστιν; (Hel. Aeth. 9.24.7.3-9.24.8.3)

[Theagenes wants Chariclea to produce the tokens she has as evidence of her being Hydaspes’ daughter. Chariclea reacts:] “‘Tokens,’ said Chariclea, ‘are tokens to those who know them or who were exposed with them; but to those who know them not or cannot understand the whole matter they are but a vain treasure, and charges of robbery and theft would be attached for those who suspect it. And even though Hydaspes should recognise some of them, who is there to convince him that Persinna gave them to me, and who [*de*] that she also gave them to me as a mother to her daughter?’”

In (47), δέ marks a transition to the contents of the letter sent with Theagenes. As always with δέ, the preceding context is still relevant as a background for the interpretation of the δέ utterance, but there is also a clear discontinuity – the previous utterance dealt with the correspondents and their respective locations, while the δέ segment signals an explicit shift to the contents of the letter. By marking this explicit shift, δέ also signals that the upcoming contents of the letter will yield positive cognitive effects on their own – note, in this respect, the shift in subject from Μιτράνης to τὰ ἐπεσταλμένα ('the things which were sent', literally; it is also in focus²⁵ position as the most salient element of the δέ segment), and the transition in the tense of the main verb (an aorist ἐξέπεμψεν in the utterance preceding δέ, an imperfect εἶχε in the δέ segment).

In (48), two separate assumptions are communicated, separated by δέ: the first assumption is that Persinna gave the tokens to Chariclea, the second that she gave them to her as a mother to her daughter. The two are not equivalent – the first one can be true without the second one being true (but not *vice versa*). As such, the two assumptions achieve relevance independently – there is clear continuity between the two assumptions in the persons involved (Persinna and Chariclea) and the way in which the question is posed (τίς ὅτι καὶ [...] ὁ πείσων ἔνεστιν;), but both of them need to be judged separately and, hence, achieve positive cognitive effects on their own.²⁶

(49) is very similar – the assumption in the utterance marked by δέ combines with the assumption communicated in the preceding utterance to produce the conclusion in the subsequent utterance, which is marked by consequential ὥστε ('so that'):

(49) Ταῦτά μοι εἴρηται παριστῶντι τὴν αἰτίαν δι' ἣν ὁ Θεὸς τὴν ξηρὰν ἐκάλεσε γῆν, ἀλλ' οὐχὶ τὴν γῆν προσεῖπε ξηράν. Διότι τὸ ξηρὸν οὐχὶ τῶν ὕστερον προσγινομένων ἐστὶ τῇ γῇ, ἀλλὰ τῶν ἐξ ἀρχῆς συμπληρούντων αὐτῆς τὴν οὐσίαν. Τὰ δὲ αὐτὴν τοῦ εἶναι αἰτίαν παρέχοντα, πρότερα τῇ φύσει τῶν μετὰ ταῦτα προσγινομένων καὶ προτιμότερα.

²⁵ See *infra* for more on the notion of 'focus' – simply put, is that part of the utterance which is prosodically and informationally prominent (see e.g. Glanzberg 2005: 72). Ancient Greek usually locates focus preverbally, but in the case of (47), there is a so-called 'broad focus' on ὧδε τὰ ἐπεσταλμένα (see Matic (2003: 582-588) for more on broad focus in Ancient Greek).

²⁶ For other examples of obvious continuity between the δέ utterance and the preceding context, see e.g. Hel. Aeth. 1.2.8.1 (where a character notices the noise another person is making and which was described in the preceding utterance) and 4.9.1.8 (where a character describes how he came to understand (γνωρίζομενον) his previous assumption); Greg. Iul. II.688.14 (which refers back to the spatial setting which was just established), Hel. Aeth. 8.3.4.1 (which refers back to the temporal setting of the previous utterance), Bas. Hex. VI.4.18 (with a focalizing καί and the adverb ὁμοίως, 'equally'), Greg. Iul. I.585.15 (with anaphoric οὕτω ('thus') marking two participles which refer back to the previous utterance), and Bas. Hex. VII.2.18 (where the previous utterance ends with ζωτοκούντων and the δέ segment begins with ζωτοκεῖ).

“ὥστε εἰκότως ἐκ τῶν προϋπαρχόντων καὶ πρεσβυτέρων ἐπενοήθη τῇ γῇ τὰ γνωρίσματα.
(Bas. Hex. IV.5.64-72)

[Basil is discussing the name and characteristics of ἡ γῆ, ‘earth’:] “I have said this in order to explain why God has given to the dry land the name of earth, but does not call the earth dry. It is because dryness is not one of those qualities which the earth acquired afterwards, but one of those which constituted its essence from the beginning. That [*de*] which provides the cause itself for a body to exist, is naturally antecedent to its posterior qualities and has a pre-eminence over them. It is then with reason that the characteristics for the earth [i.e., dryness, SZ] were conceived out of the pre-existing and older qualities.”

The first assumption is that ‘dryness’ or τὸ ξηρόν is constitutive of ἡ γῆ, and has been from the beginning of God’s creation; the second assumption, marked by δέ, is that things which are causally responsible for the existence of something else, precede things which came afterwards (πρότερα) and are also more honored than these ‘posterior qualities’ (τῶν μετὰ ταῦτα προσγινομένων). The inference is that τὸ ξηρόν preceded other qualities of earth and is more honored than these other qualities, and was hence chosen as the basic, distinguishing quality (τὰ γνωρίσματα) of earth. As such, the assumption marked by δέ and the one preceding it should be taken together to yield the conclusion marked by ὥστε. They are still separate assumptions, but there is also an obvious continuity between them – the assumption communicated in the utterance preceding δέ functions as the context with which the assumption communicated in the utterance marked by δέ has to be integrated to produce the assumption communicated (i.e., the inference) in the utterance marked by ὥστε (see also Blakemore & Carston (2005: 574) on *and*).

Compare (49) to (50):

(50) «Ἀλλὰ τούτου γε ἔνεκα θάρσει» ἔλεγεν ὁ Καλάσιρις, «ὥς ὄντος ἐκείνου καὶ σοὶ συνεσομένου θεῶν νεύοντων, εἴπερ τι χρὴ τοῖς τε προθεσπισθεῖσι περὶ ὑμῶν (χρὴ δέ) πιστεύειν καὶ τῷ διαγγείλαντι χθιζὸν ὥς εἴληπται ὑπὸ Θυάμιδος εἰς τὴν Μέμφιν ἀναπεμπόμενος. (Hel. Aeth. 6.9.5.1-6.9.5.5)

[Chariclea, who has been separated from Theagenes, tells Calasiris that she is concerned about Theagenes’ well-being. Calasiris reacts:] “But take heart from this,” said Calasiris, ‘that he is alive and by God’s favor will one day be joined to you, if we must give credit to what the oracle foretold about you (and [*de*] we must), and believe also him who told us yesterday that as he was being carried to Memphis he was taken prisoner by Thyamis.”’

Again, we get two separate assumptions here, in a simple material implication of the type ‘If X, then Y’. The Y, in this case, is ‘Theagenes is alive and you will see him again’;

the condition (X) is ‘if it is necessary to believe the oracle and the guy who told us yesterday that he has been taken prisoner by Thyamis’. Now, the assumption that X must be true is usually left implicit²⁷ – but it is made explicit here. This assumption is taken care of by the δέ segment, which is heavily elided and states that the conditional clause introduced by εἴπερ is, in fact, true. As such, δέ marks a separate assumption which relies on the surrounding assumption provided in the εἴπερ clause – both syntactically, as it works out to χρή δέ [τοῖς τε προθεσπισθεῖσι περὶ ὑμῶν πιστεύειν καὶ τῷ διαγγείλαντι χθιζὸν ὥς εἴληπται ὑπὸ Θυάμιδος εἰς τὴν Μέμφιν ἀναπεμπόμενος] in full; and in terms of content, as the δέ utterance amounts to confirmation that the assumption communicated in the εἴπερ clause is true. There is, then, once again clear continuity between the δέ segment and its surrounding context.²⁸ At the same time, the δέ segment also clearly communicates a separate (i.e., discontinuous) assumption in the inferential process resulting in the derivation of the material implication – that is, the assumption that another assumption is true.

3.2.3.2 On the so-called ‘topicalizing’ use of δέ

The preceding examples have shown that Bakker and Black were on the right track in putting ‘discontinuity’ at the center of their discussions of δέ’s function. However, as we have seen, things are not quite so simple – there is an obvious continuous component to its meaning, in that the utterances it marks make frequent reference (semantically, syntactically and contextually) to assumptions established in the preceding utterances. This is also demonstrated by examples like the following, which are what I would call ‘concatenating’ – see also (40) *supra*:

(51) Ἐξαγαγέτω ἡ γῆ ψυχὴν ζῶσαν. Διὰ τί ἡ γῆ ψυχὴν ζῶσαν ἐξάγει; Ἵνα μάθῃς διαφορὰν ψυχῆς κτήνους καὶ ψυχῆς ἀνθρώπου. Μικρὸν ὕστερον γνώσῃ, πῶς ἡ ψυχὴ τοῦ ἀνθρώπου συνέστη· νῦν δὲ ἄκουε περὶ τῆς τῶν ἀλόγων ψυχῆς. Ἐπειδὴ κατὰ τὸ γεγραμμένον, παντὸς ζώου ἡ ψυχὴ τὸ αἷμα αὐτοῦ ἐστίν· αἷμα δὲ παγὲν εἰς σάρκα πέφυκε μεταβάλλειν· ἡ δὲ σὰρξ φθαρεῖσα εἰς γῆν ἀναλύεται· γεηρά τίς ἐστίν εἰκότως ἡ ψυχὴ τῶν κτηνῶν. (Bas. *Hex.* VIII.2.1-8)

²⁷ As in the following implication:

‘If X is true, Y.

X.

Therefore, Y.’

The second step is marked by δέ in (50).

²⁸ In this case, not the *preceding* context, as the assumption to which the δέ utterance applies continues after the δέ segment.

[Basil is continuing his discussion of the different lines of the book Genesis:] “Let the earth bring forth a living soul.’ Why did the earth produce a living soul? So that you may learn the difference between the soul of cattle and that of man. A bit later you will know how the human soul was formed; hear now about the soul of creatures devoid of reason. Since, according to Scripture, the soul of every creature is in the blood; and the blood [de] when thickened changes into flesh; and flesh [de] when corrupted decomposes into earth; the soul of beasts is naturally an earthy substance.”

(52) Ἡσχόλουν δὲ οὐδὲν εἰς ταῦτα τὰς χεῖρας ἀλλ’ ὑπὲρ τῆς κεφαλῆς ἀχθοφοροῦσαι πρὸς χορὸν στιχῆρη καὶ ἐγκάρσιον ἀλλήλων εἶχοντο, ὡς ἂν βαδίζειν τε ἅμα καὶ χορεύειν αὐταῖς ἐγγίνοιτο. Τοῦ δὲ μέλους αὐταῖς τὸ ἐνδόσιμον ὁ ἕτερος χορὸς ὑπεσήμαινεν, οὗτος γὰρ τὸν ὅλον ἐπετέτραπτο μελωδεῖν ὕμνον· ὁ δὲ ὕμνος ἦν, ἡ Θέτις ἐπηνεῖτο καὶ ὁ Πηλεὺς καπὶ τούτοις ὁ ἐκείνων παῖς καὶ ὁ τούτου πάλιν. (Hel. Aeth. 3.2.2.1-7)

[Calasiris is describing the procession at Delphi. One of the groups participating consists of Thessalian maidens, who are divided into two companies. The first is carrying baskets full of flowers and fruits:] “They carried these things not in their hands but on their heads, and held hands together forward and backward in line, so that they might the more easily move in the dance. They received the prelude to the song from another company, for it was the duty of these to sing the whole hymn. In the song [de] was Thetis praised and Peleus, and with them their son, and his son again.”

(53) Τῷ δὲ αἰσχροῦ μὲν τὰ τῆς ἐκστρατείας (ἡλαύνετο δήμοις καὶ πόλεσι, καὶ φωναῖς δημοσίαις καὶ βωμολόχοις, ὧν ἔτι καὶ νῦν οἱ πολλοὶ μνημονεύουσιν), ἀδοξότερα δὲ ἡ ἐπάνοδος. Τίς δὲ ἡ ἀδοξία; (Greg. Iul. II.688.3-6)

[Julian’s predecessor, his half-brother Constantius II, was given a glorious escort and burial after his death. Constantius’ supposed popularity is contrasted with Julian’s eventual funeral escort and burial:] “But as for the other [i.e., Julian, SZ], the circumstances attending his departure to the war were disgraceful (he was pursued by mobs and townsfolk, and with vulgar and ribald cries, as most people still now too remember), but still more inglorious was his return.²⁹ What [de] was his disgrace?”

In all three examples, the narrator transitions to a constituent which was mentioned in some way in the previous instance. In (51), the soul of every living creature is blood; in the next utterance, blood (αἷμα δέ) is changed into flesh; finally, flesh (σάρξ δέ) is changed into earth. In (52), the group of Thessalian maids are charged with singing a hymn; in the δέ utterance, the hymn is identified as a song in honor of Peleus, Thetis,

²⁹ Julian died during his war against the Persians – the ‘return’ mentioned here was, then, as a corpse.

Achilles and Neoptolemus. In (53), Gregory states that Julian's return to Tarsus was even more inglorious (ἄδοξοτέρᾳ) than his departure for his war against the Persians; in the δέ utterance, the 'disgrace' (ἡ ἄδοξία) of this return is the subject of the rhetorical question, and hence becomes the focus of attention. In all three cases, then, there is a concatenation or 'chain' of information – a concept is introduced in the utterance preceding δέ, and then made the focus of attention in first position in the δέ segment.

The reason why I discuss these cases separately is because they would be considered to be instances of the topicalizing function of δέ under a coherence approach. This function would fit under Bakker's 'switch-reference' and 'perspectival' uses of δέ, and would also fit in under a subcategory of DMs known as 'topic switch markers' (Soltic 2015: 64). However, there is no reason to assume that this use is any different from the basic function of δέ, which is to indicate contextual continuity-within-discontinuity. To get at why this is the case, we need to take a look at the coherence-based notion of 'topic' – and also at how relevance theory argues against this notion.

The discourse-pragmatic notion 'topic' has to do with 'aboutness'. Put simply, a 'topic' is that constituent (or group of constituents) which the utterance 'is about', i.e., the entity which the utterance provides information about (Reinhart 1981: 60). However, this 'aboutness' property has often been conflated with what Gundel & Fretheim (2004) call 'referential givenness' – topics are always 'referentially given' in that they are already active in the hearer's consciousness.

(54) A: How's Mary?

B: Well, she was able to go to work today, so she's probably feeling better.

In (54), B's answer predicates something about Mary, who was introduced by A as the topic.

A topic can never be referentially new – it can never be non-active in the audience's consciousness. Yet this does not mean that every referentially given element is a topic:

(55) A: Who called?

B: Pat said *SHE* called. (Gundel & Fretheim 2004: 177)³⁰

In this case, 'she' is referentially given – it refers to Pat, and is hence obviously active in both A's and B's consciousness (it has just been mentioned). However, it is not the topic of B's utterance. It provides the information A is looking for, and can hence be considered the so-called 'focus' of the utterance (cf. footnote 25 *supra*) – it predicates

³⁰ Small caps indicate prosodic emphasis here.

something about the topic. Here, A knows that someone has called, but she doesn't know who, and so asks B the question in (54) – B has to fill in the variable [x called]. As such, the focus predicates something about the topic, which, in this case, is the identity of the person who called. This (the unknown person who called) is the topic about which something is predicated in B's utterance. Referential givenness, then, has to be separated from relational givenness. An item is relationally given if it is what the sentence is about, while an item is relationally new if it predicates something about the topic. In (55), 'she' is referentially given but relationally new, as it predicates something about the topic (the person who called, and who is unknown to A).³¹ 'Topic' here will be restricted to those items which are relationally given in this sense (see also Dik 2007: 31).³²

Turning to Ancient Greek, *δέ* is often regarded to have a topic-marking function – it marks transitions to new topics (Bakker 1993: 293; Martín López 1993: 225-227). (51)-(53) would seem to be prime examples of this function – in (52), for instance, *ὁ ὕμνος* is the topic about which information is predicated (in this case, the fact that it took place and that its subject matter consists of Thetis, Peleus and their progeny); in (53), *ἡ ἀδοξία* is presented as the topic of the next utterance, embedded in a rhetorical question which 'sets the table' for the upcoming answer. However, the utterances are not about 'the hymn' and 'the disgrace', respectively, but about the context which is made available by those constituents – as Sperber & Wilson (1995²: 216; see also Wilson 1998) point out, an utterance will be 'topic relevant', i.e., provide information about a topic, in that it should be interpreted against a "homogeneous context derivable from" a single concept. In (52), the *δέ* utterance does not provide information about 'the hymn' (*ὁ ὕμνος*), but about 'the hymn which part of the group of Thessalian maids at the procession in Delphi sing' – this is the context which forms the background against which the *δέ* utterance as a whole should be interpreted. Note that this context is indeed 'referentially given' in Gundel & Fretheim's (2004) sense in that it was made available in the previous utterances. In (53), the *δέ* utterance is not about 'the disgrace' (*ἡ ἀδοξία*), but about the disgrace connected to Julian's return as a corpse from his war against the Persians. Again, the topic (*ἡ ἀδοξία*) works as a trigger for activating a set of contextual assumptions which are relevant as the background against which the *δέ* utterance as a whole should be interpreted.

In this sense, there is very little difference between instances like (51)-(53) and, for example, the instances with *ἐπεί*, *ἐπειδή* or *ὥς* in (41)-(43) *supra* (or, for that matter, the

³¹ See also Reinhart (1981: 60-61).

³² Unsurprisingly, there is a cross-linguistically strong correlation between 'topic' in this sense and (syntactic) subject – usually, the sentence is 'about' the syntactic subject (Lambrecht 1994: 136).

genitive absolute in (44)). There, the subordinate clauses introduced contextual assumptions which had been made available in the previous utterances, and which were recapped as a ‘springboard’ from which the hearer launches to interpret the rest of the utterance. With ἐπεὶ, ἐπειδή or ὥς, the relevant contextual assumptions are provided in the form of a full clause; with the topics in (51)-(53), the relevant contextual assumptions are made available in the form of a single concept.³³ In both cases, there is clear continuity and discontinuity. The previous context is obviously relevant for interpreting the δέ utterance, but there is also a transition in that the δέ utterance is ‘about’ a ‘topic’ (i.e., a set of contextual assumptions) which were introduced in the previous utterance – this previous utterance, then, added contextual assumptions to the existing cognitive environment, and these contextual assumptions now provide the basis for the interpretation of the next segment. As such, δέ marks its utterance as being part of a contextual chain – it activates a procedure which leads the hearer to take a salient set of contextual assumptions, established in the previous utterance, and use it as a background for interpreting the δέ utterance.³⁴

The putative ‘topicalizing’ use of δέ is often applied to those instances where a specific person, pronoun or quasi-pronoun (as in (33)) occurs in first position (example (57) repeats (41), where a different δέ was discussed – it is quoted again for convenience):

(56) Φεῦγε φληνάφους τῶν σοβαρῶν φιλοσόφων, οἳ οὐκ αἰσχύνονται τὰς ἑαυτῶν ψυχὰς καὶ τὰς κυνείας ὁμοειδεῖς ἀλλήλαις τιθέμενοι· οἱ λέγοντες ἑαυτοὺς γεγενῆσθαι ποτε καὶ γυναικας καὶ θάμνους καὶ ἰχθύας θαλασσίους. Ἐγὼ δὲ εἰ μὲν ἐγένοντό ποτε ἰχθῦς οὐκ ἂν εἴποιμι, ὅτι δὲ ἐν ᾧ ταῦτα ἔγραφον τῶν ἰχθύων ἦσαν ἀλογώτεροι, καὶ πάνυ εὐτόνως διατειναίμην. (Bas. Hex. VIII.2.16-22)

[Basil argues that human souls are different from animal ones.] “Avoid the nonsense of those arrogant philosophers who do not blush to liken their soul to that of a dog; who say that they have been formerly themselves women, shrubs, fish. I [*de*] cannot say if they have ever been fish, but I do contend vigorously that in their writings they show less sense than fish.”

(57) αὐτὸς δὲ δι’ ἄλλης ὁδοῦ εὐπορωτέρας τε καὶ ἀσφαλεστέρας, ἧς ἐγὼ σοι καθηγητῆς (ἔμπειρος δὲ εἴ τις ἄλλος φημὶ τῆς χώρας εἶναι τῆς Περσικῆς), ἐμβαλεῖς τε εἰς τὴν

³³ Usually, these ‘topics’ are located in first position, as in (51) and (52) – see e.g. Dik (2007). In (53), the topic is preceded by an interrogative – interrogatives are usually located in first position themselves (see Thomson 1939).

³⁴ For other examples, see e.g. Bas Hex. I.10.22, II.8.49, III.3.37, IV.5.20, VIII.2.66, II.8.49; Hel Aeth. 4.20.3.1, 5.16.1.1, 8.11.2.1.

πολεμίαν, καὶ τῶν κατὰ γνώμην τυχὼν ἐπανήξεις· ἡμᾶς δὲ τηνικαῦτα εὖ ποιήσεις, ἡνίκα ἂν ἔργῳ πείραν λάβῃς τῆς ἡμετέρας εὐνοίας καὶ παραινέσεως. Ὡς δὲ εἶπε ταῦτα, καὶ εἰπὼν ἔπεισεν, εὐπιστον γὰρ ἢ κουφότης, καὶ τοῦ Θεοῦ μάλιστα συνελαύνοντος, ἅπαντα ἦν ὁμοῦ τὰ δεινά. (Greg. *Iul.* II.677.29-39)

[Julian has embarked on his expedition against the Persians. He meets with a Persian who tries to convince him that Julian should split his army in two and that the emperor, with one part of his army, should take a safer route than he had planned to take:] “You [i.e., Julian, SZ] yourself will take another route, better supplied and safer; along which I will be your guide (being acquainted with the country as well, I say, as any man of the Persian lands), and will cause you to enter into the heart of the enemy's country, where you can obtain whatever you please, and so make your way home; and us [*de*] you shall then recompense, when you have actually made proof of my good will and good advice.’ And when he had said this, and gained credence to his story (for credulous is relief, especially when God drives it on), everything that was dreadful happened at once.”

(58) Ἐπεὶ δὲ τοὺς τε καταφράκτους, τὴν μεγίστην τοῦ πολέμου χεῖρά τε καὶ ἐλπίδα νομιζομένους, διεφθαρμένους κατέμαθον τὸν τε σατράπην ἀποδεδρακότα τοὺς τε Μήδων καὶ Περσῶν πολυθρυλήτους ὀπλίτας οὔτε τι παρὰ τὴν μάχην λαμπρὸν ἀποδεδειγμένους ἀλλ’ ὀλίγα μὲν δράσαντας κατὰ τῶν ἐκ Μερόης, οἱ κατ’ αὐτοὺς ἐτάχθησαν, παθόντας δὲ πλείονα καὶ τοῖς λοιποῖς ἐφεπομένους, ἐνδόντες καὶ αὐτοὶ προτροπάδην ἔφευγον. Ὁ δὲ Ὑδάσπης ὥσπερ ἀπὸ σκοπῆς τοῦ πύργου λαμπρᾶς ἤδη τῆς νίκης θεωρὸς γινόμενος κήρυκας διαπέμπων εἰς τοὺς διώκοντας τοῦ μὲν φονεύειν ἀπέχεσθαι προηγόρευε ζῶντας δὲ οὓς δύναιντο καὶ συλλαμβάνειν καὶ ἄγειν, καὶ πρὸ πάντων τὸν Ὀροονδάτην. (Hel. *Aeth.* 9.20.1.1-9.20.2.6)

[Persian and Ethiopian troops are fighting. The battle is presented from the perspective of the Persian troops:] “When they learnt that the armoured cavalry, who were accounted their strongest military arm and hope, had been annihilated; that the satrap [Oroondates, SZ] had fled away; and that the celebrated armed troops of the Medes and Persians, instead of distinguishing themselves in the battle, had done much less harm to those from Meroë [i.e., the Ethiopians, SZ], who were ranged opposite to them, and that they had undergone more, and that were retreating after the rest; they gave way and in their turn took to headlong flight. Hydaspes [*de*], even as he beheld, from the magnificent tower on the back of an elephant, the now manifest victory, and sent out heralds to his pursuing troops, ordered them to refrain from slaughter and to capture alive any of the foe whom they could seize and bring them in, and above all Oroondates.”

These examples are continuous and discontinuous in a different sense than the ones in (51)-(53). Here, the point is not necessarily that the constituent in first position triggers a set of contextual assumptions related to that constituent.³⁵ Instead, the discontinuity lies mainly in the constituent in first position – it indicates a shift in perspective (see Bakker (1993) and §3.1.2). Yet, although the perspective changes, the contextual assumptions on which the perspective changes do not – in (56), Basil gives his own perspective on the dissociation between body and soul as it is described by pagan philosophers (and as it was outlined in the previous utterances). In (57), Julian’s Persian guide predicts that Julian will do well by him (ἡμᾶς) when he has evidence of his good intentions – but those good intentions are to be considered in terms of his promise in the utterance preceding δέ, where he promised to guide Julian down a safer path into the heartlands of Persian territory. In (58), the previous utterance had provided the Persian perspective on their battle with the Ethiopians; with the δέ utterance, the perspective shifts to the Ethiopians’ side – more specifically, to Hydaspes’ perspective. However, Hydaspes’ perspective, and the decisions outlined in the δέ utterance, can only be interpreted against the background of the Persians’ rout, described in the utterance preceding δέ. Again, the perspective shifts, but this new perspective provides a window on Hydaspes’ view of the scene described in the previous utterance – for Heliodorus’ audience, then, the set of contextual assumptions made available in the utterance preceding δέ function as the background against which the δέ segment has to be interpreted. As such, there is clear continuity of context, within the discontinuity present in every δέ utterance – in (56), the δέ segment provides information about Basil’s thoughts on the pagan philosophers’ views on the regeneration of the soul, outlined in the preceding segment; in (57), the δέ segment provides information about what the Persian guide is set to gain from the preceding arrangement with Julian; in (58), the δέ segment provides information about Hydaspes’ reaction to the preceding flight of the Persians.³⁶

However, there are other examples of the combination [pronoun + δέ]³⁷ which are not so readily subsumed under the ‘continuity-within-discontinuity’ view:

(59) Καὶ περὶ τούτων ἔτι διασκοπούμενοις ἡμῖν ἐφίσταται τις ἐσπουδασμένος· καὶ «ὦ ἄγαθοι» φησὶν «ὕμεῖς δὲ ὥσπερ ἐπὶ μάχην ἢ πόλεμον ἄλλ’ οὐκ εὐωχίαν κληθέντες οὕτω

³⁵ Although they do make some general contextual assumptions available – ἐγώ in (56), for instance, triggers assumptions about Basil (e.g. that he is a bishop who is inimical towards pagan philosophers, for instance); in the same vein, ὁ Ὑδάσπης will activate assumptions related to Hydaspes (for example, that he is the leader of the Ethiopian side in this battle).

³⁶ See also e.g. Bas. *Hex.* V.9.25, IX.1.20, II.7.37; Greg. *Iul.* I.119.40; Hel. *Aeth.* 3.18.2.5, 5.2.9.5, 6.5.2.4, 8.17.3.4.

³⁷ Or, as is the case in (58), [article used as a pronoun + δέ].

μέλλετε, ἥν παρασκευάζει μὲν ὁ κάλλιστος Θεαγένης ἐποπτεύει δὲ ὁ μέγιστος ἡρώων Νεοπτόλεμος. Δεῦρ' ἴτε μηδὲ εἰς ἑσπέραν τὸ συμπόσιον παρέλκετε μόνοι τῶν πάντων ἀπολειπόμενοι.» (Hel. Aeth. 3.10.1.1-7)

[Calasiris has been asked by Charicles to help determine what is wrong with Chariclea, who has been sick since the procession at Delphi. Calasiris attempts to convince Charicles that she has fallen under the spell of the evil eye.] “While we were still discussing the matter a man hurried up to us and said: ‘Gentlemen, you [*de*] are loitering as though you had been summoned to a battle or a war instead of a banquet which is being provided by that most handsome of youths Theagenes, and presided over by that greatest of heroes Neoptolemus. Come along; do not stretch out the festivity until evening, for you are the only ones missing from the party.’”

(60) Ἐπεὶ δὲ δείπνου πρὸς ὀλίγον μεταλαβόντες εἰς ὕπνον ἐτράπημεν, ὄναρ μοί τις πρεσβύτης ἐφαίνετο τὰ μὲν ἄλλα κατεσκληκῶς ἐπιγουνίδα δέ, λείψανον τῆς ἐφ' ἡλικίας ἰσχύος, ἀνεσταλμένου ζώματος ὑποφαίνων, κυνῆν μὲν τῆς κεφαλῆς ἐπικείμενος ἀγχίνουν δὲ ἅμα καὶ πολύτροπον περισκοπούμενος καὶ οἶον ἐκ πληγῆς τιнос μηρὸν σκάζοντα παρέλκων. Πλησιάσας δὴ μοι καὶ σεσηρός τι μειδιάσας «ᾧ θαυμάσιε» ἔφη, «σὺ δὲ μόνος ἐν οὐδενὸς λόγου μέρει τέθεισαι τὰ καθ' ἡμᾶς ἀλλὰ πάντων ὅσοι δὴ τὴν Κεφαλλήνων παρέπλευσαν οἶκόν τε τὸν ἡμέτερον ἐπισκεψαμένων καὶ δόξαν γνῶναι τὴν ἡμετέραν ἐν σπουδῇ θεμένων αὐτὸς οὕτως ὀλιγώρως ἔσχηκας ὥς μηδὲ τοῦτο δὴ τὸ κοινὸν προσειπεῖν, ἐν γειτόνων καὶ ταῦτα οἰκοῦντα. (Hel. Aeth. 5.22.1.1-5.22.2.8)

[Charicles has just told Theagenes and Chariclea that they will have to leave by boat after nightfall.] “After having a little supper together we betook ourselves to sleep. Then in a dream an old man appeared to me whose form was withered away, except that where his doublet was trussed up he showed in his thigh muscles some relics of the robustness of his prime. On his head he wore a leathern cap; he looked about him with glances at once sagacious and wily; and he dragged a limping leg, as though he had been wounded. ‘Reverend sir’, he said, ‘you [*de*] alone have treated us as persons of no account. From all who have voyaged past the island of the Cephallenians, and who have taken note of my house and made it their concern to acquaint themselves with my renown, you have distinguished yourself by such disdain that you did not show me even the courtesy of an ordinary greeting, although I was dwelling in the neighbourhood.’”

In (59) and (60), there is obvious continuity between the segment marked by δέ and the vocative preceding it – the nominatives (ὕμεῖς and σύ) refer to the same person being addressed with the preceding vocatives (ᾧ ἄγαθοι and ᾧ θαυμάσιε). However, there is no obvious discontinuity with the preceding context – in both cases, the speaker had not said anything previously. It would seem, then, that examples like this (see also Hel. Aeth. 4.19.2.2 and 5.11.3.1) argue against the hypothesis that δέ signals discontinuity. However, δέ is used in a very specific way here – it is not used

connectively. In all previous instances, *δέ* connected two utterances to each other; in (59) and (60), it cannot function as such, as it is only preceded by a vocative (which refers to the same referent as the nominative in first position does). In fact, if a nominative personal pronoun (*ἐγώ*, *σύ*, *ἡμεῖς* or *ὕμεῖς*) occurs in first position, it almost always occurs with *δέ* in second position. The only exceptions to this tendency include those instances where they are instead followed by *μέν* or *γάρ*, or preceded by *ἀλλά* – in other words, if the utterance in which they occur is marked by a different DM.

As with *ὁ*, it may be the case that nominative personal pronouns trigger the use of *δέ* in a process of grammaticalization. This process would have been sparked by examples such as (56)-(58) – i.e., instances where there is clear discontinuity. In Ancient Greek, a pro-drop language, it is never grammatically required to express a nominative personal pronoun, and its presence is usually prompted by pragmatic considerations – the use of a nominative personal pronoun often involves placing emphasis on the person being referred to (Dik 2003). If the nominative is added, then, it often involves perspectival discontinuity in Bakker’s sense, where the speaker indicates that the information to be presented offers up someone’s specific point of view (as in examples (56)-(58)). As shifts in perspective are standardly (continuous-within-)discontinuous contexts, the use of *δέ* with these shifts may have become so entrenched that the complex [nominative personal pronoun + *δέ*] was felt to be a unit of which the elements belonged together. This, in turn, may have led to cases like (59) and (60), where there is no clear discontinuity, but *δέ* is still used when a nominative personal pronoun is placed in the first position of the segment.³⁸ This hypothesis is, of course, highly speculative, and would require much more (diachronic) research.³⁹ However, the explanation provided here would reinterpret the small number of instances which are seemingly non-discontinuous as discontinuous in a historical sense, by placing them under the banner of the continuity-within-discontinuity hypothesis from a broader, diachronic perspective.⁴⁰

³⁸ Note that ‘segment’ and ‘clause’ here do not overlap – the clause begins with the vocative in both (59) and (60), but it forms a separate, subclausal segment, separated by *φησὶν* and *ἔφη* respectively. See Scheppers (2011: 194-219) for an overview of subclausal constructions which tend to form separate segments – he explicitly refers to vocatives, but also *ἔφη*. These segments are equivalent to Chafe’s (and Bakker’s) ‘intonation units’, which can be smaller than a clause, and are always set off from their surroundings prosodically.

³⁹ It should be noted that examples like (59) and (60) do not only present problems for my model, but also for Bakker’s and Black’s – both of them rely on a similar notion of discontinuity which does not seem to apply to (59) and (60).

⁴⁰ Of course, examples of *ἐγώ*, *σύ*, *ἡμεῖς* or *ὕμεῖς* in first position *without* a *δέ* would disrupt the hypothesis – and these do occur (see e.g. *Hel. Aeth.* 4.12.1.4, 7.28.5.2 and *Greg. Iul.* II.704.20 for *ἐγώ* and *Hel. Aeth.* 10.11.3.4 for *ὕμεῖς*; *Bas. Hex.* VII.3.12 and VII.6.3 for *σύ*). However, these examples are the exception rather than the rule – in most cases, the nominative personal pronouns are either marked by a DM (mostly but not limited to *δέ*), not

In Heliodorus, (quasi-)pronouns such as ἐγώ and ὁ often co-occur with δέ in reactions:

(61) Καί μοί τις ἀπήγγελλεν ὡς ἐξώρμησε μᾶλλον δὲ ἐξελήλαται, πρὸ ἡλίου δυσμῶν εἰ μὴ τῶν ὄρων ἐκτὸς γένοιτο θάνατον αὐτῷ τοῦ σατράπου διαπειλήσαντος· ἐμοῦ δὲ ἐρομένου τὴν αἰτίαν «ὅτι» ἔφη ὁ ἀπαγγέλλων «ἐπέταττεν ἀπέχεσθαι τῶν σμαραγδείων μετάλλων ὡς Αἰθιοπία προσηκόντων.» (Hel. Aeth. 2.32.2.1-2.32.1.7)

[Charicles has just taken charge of Chariclea, given to him by an envoy from the Ethiopian king. The next day, he goes to the Persian satrap's palace and asks where the envoy is.] "I was informed that he had departed, or rather, had been expelled, the satrap having threatened him with death if he had not passed over the frontier before sunset. When I [δε] asked the reason of this my informant replied: 'Because he ordered the satrap to keep his hands off the emerald mines, since they belonged to Ethiopia.'"

(62) Κάπειδὴ παραστάντας ὁ Ὑδάσπης εἶδεν, ἀνήλατο πρὸς βραχὺ τοῦ θρόνου καὶ «Ἰλήκοιτε θεοί» φήσας αὐθις ἐπὶ συννοίας ἑαυτὸν ἥδραζε. Τῶν δὲ ἐν τέλει παρεστῶτων ὅτι πεπόνθοι πυνθανομένων, «Τοιαύτην» ἔφη «τετέχθαι μοι θυγατέρα τήμερον καὶ εἰς ἀκμὴν τοσαύτην ἥκειν ἀθρόον ὥμην· καὶ τὸ ὄναρ ἐν οὐδεμιᾷ φροντίδι θέμενος νυνὶ πρὸς τὴν ὁμοίαν τῆς ὀρωμένης ὄψιν ἀπῆνεγκα.» (Hel. Aeth. 9.25.1.3-9.25.1.9)

[Theagenes and Chariclea are brought before king Hydaspes for the first time – they had been captured during a raid by some Ethiopian troops. Hydaspes is not yet aware that Chariclea is his daughter.] "When Hydaspes saw them standing before him he started up for a moment from his throne and said: 'Ye gods, be gracious to me!' and then resumed his seat, in deep thought. The officers in attendance [δε] asked what it was that troubled him, and he answered: 'I had in mind a fancy that a daughter like this girl was today born to me, and that of a sudden she had come, like her, to the flower of her age.'

in first position, or even part of quotes from the Bible (see e.g. Bas. Hex. I.9.15 and IX.6.79). One example has ἐγώ followed by τε (Hel. Aeth. 5.20.8.2; see also 4.10.4.3, where ἐγώ is followed by τε but also by γάρ), which may just be a textual corruption for δέ. In addition, Gregory has a chain of five σύ's without δέ following each other closely (Iul. I.588.9-10-11-12-13), which also seems to be a rather uncommon occurrence, and can be considered a rhetorical flourish – Gregory is asking whether 'you' (i.e., Julian) waged war against Christ, whether 'you' fought against peace, whether 'you' raised your hand against the hand that was nailed for you, and so on. By adding a σύ at the beginning of each of these questions, he explicitly connects these transgressions to Julian every time, and emphasizes the emperor's personal role in his battle against the basic principles of Christianity. Marking these instances with δέ might raise the (non-speaker-intended) interpretation that another 'you' is addressed.

Note that the instances in (59) and (60) are very similar to the instance in (1), which, according to Denniston, was 'superfluous'. In that sense, Denniston was right – from a synchronic perspective, δέ could indeed be seen as superfluous in that there is no clear transition from one perspective to another (i.e., continuity-within-discontinuity).

Of this dream I made no account, but just now recalled it, because of the resemblance appearing in her at whom I was looking.”

(63) Ὡστε καὶ τὸν Ὑδάσπην ἐνορῶντα εἰς τὸ θάμβος καὶ τὴν συνέχουσιν ἀγωνίαν «ᾧ γύναι» εἶπεῖν «τί ταῦτα; ἢ τί πέπονθας πρὸς τὴν δεικνυμένην γραφήν;» Ἡ δὲ «ᾧ βασιλεῦ» εἶπε «καὶ δέσποτα καὶ ἄνερ, ἄλλο μὲν οὐδὲν ἂν εἴποιμι πλεον, λαβὼν δὲ ἀναγίνωσκε διδάσκαλός σοι πάντων ἡ ταινία γενήσεται.» (Hel. Aeth. 10.13.2.1-10.13.2.7)

[Chariclea is trying to convince Hydaspes and Persinna that they are her parents. She produces the swathe with which she was exposed to Persinna. Persinna starts trembling and sweating from the shock of the discovery that Chariclea is indeed her daughter.] “Hydaspes in consequence too, observing for himself her astonishment and overpowering anguish, said to her: ‘Wife, what does this mean? Or what disturbs you so in this writing that she is showing you?’ And she [*de*] said, ‘King, my lord and husband, I can speak not a word more; take it and read it; this swathe will inform you of everything.’”

In (61), δέ marks a transition from the information provided by Charicles’ informant to Charicles’ reaction to that information – he wants to know the reason (τὴν αἰτίαν) behind the Ethiopian envoy’s being expelled. In (62), δέ marks a transition from Hydaspes’ reaction to seeing Chariclea, to Hydaspes’ officers reaction to *that* reaction. In (63), δέ marks a transition from a question to the addressee’s reaction to that question.⁴¹ All three of these are, at their core, instances of continuity-within-discontinuity – the preceding context is taken as the background against which someone else’s reaction has to be seen. Charicles is asking for the reason for the envoy’s forced departure in (61); Hydaspes’ officers are reacting to his invocation of the gods in (62) – neither of these utterances can be interpreted by the hearer as the speaker intends them to without having recourse to previously communicated assumptions. In (61), the speaker reacts to an explicitly communicated assumption; in (62), the speaker reacts more to the implicitly communicated assumption derived from the further assumption that someone who asks for the gods to have mercy on him (ἰλήκοιτε) is in some sense troubled.⁴²

In examples (56) through (58) and (61) through (63), δέ is used in utterances which contain shifts in perspective. This shift in perspective is always indicated by the element in first position, the position reserved for topics in Ancient Greek (Dik 1995, 2007).

⁴¹ Reactions to questions are also marked by δέ in e.g. Hel. Aeth. 1.13.4.4, 2.23.3.3, 4.5.2.4, 6.3.2.1 and 7.26.5.1.

⁴² Examples like (61)-(63) do not occur in Basil or Gregory, presumably because these are monological texts which contain very little dialogue, and, as such, do not contain many shifts of perspective between interlocutors.

However, these shifts in perspective never comprise an outright break with the previous context – in all instances discussed here, the interpretation of the δέ utterance requires using contextual assumptions made available in the previous utterances. In essence, then, δέ again marks continuity-within-discontinuity: a shift in perspective which provides a new look on assumptions which are already mutually manifest.

3.2.3.3 Evidence and reformulations: against a coherence approach

Intriguingly, δέ can co-occur with utterances which explicitly aim to provide evidence for the previously communicated assumption. Denniston (1954²: 58) implies that δέ often co-occurs with expressions such as τεκμήριον and σημεῖον, which both mean ‘a sign’ or ‘a proof’ – hence, δέ co-occurs with expressions which seem to point to an ‘Evidence’ relation on a coherence account in Classical Greek already. It does so too in the texts under consideration here:

(64) οἷς πόση πρὸς ἄλληλά ἐστιν ἡ διαφορὰ, οὐδεὶς ἂν λόγος ἐξίκοιτο. Ἄλλο γὰρ τοῦ σχίνου τὸ δάκρυον, καὶ ἄλλος ὁ ὁπὸς τοῦ βαλσάμου· καὶ νάρθηκές τινες ἐπὶ τῆς Αἰγύπτου καὶ Λιβύης ἕτερον ὁπῶν γένος ἀποδακρύνουσι. Λόγος δέ τίς ἐστι καὶ τὸ ἤλεκτρον ὁπὸν εἶναι φυτῶν εἰς λίθου φύσιν ἀποπηγνύμενον. Μαρτυρεῖ δὲ τῷ λόγῳ τὰ ἐμφαινόμενα κάρφη καὶ τὰ λεπτότατα τῶν ζώων, ἅπερ, ἀπαλοῦ ὄντος τοῦ ὁποῦ, ἐναποληφθέντα κατέχεται. (Bas. Hex. V.8.25-33)

[Basil is describing the variety in the way water is used by trees – it becomes leaves, it is used to make fruit grow, and it is used to produce gum and sap. The latter two are what he gets into now:] “[...] On how many differences are there between these, no words could suffice. There is a difference between the gum of the mastich and the juice of the balsam, and a difference between that which distils in Egypt and Libya from the fennel. Amber is, they say, the sap of plants which has been crystallized. And for a proof [*de*] for this proposal, you have the bits of straws and little insects which have been caught in the sap while still liquid and imprisoned there.”

(65) Ἐγὼ δὲ καὶ τὰς αἰτίας ὑμῖν ἀπολογίσασθαι βούλομαι. Πρῶτον μὲν⁴³ εὐγενὴς εἶναί μοι δοκεῖ τεκμαίρομαι δὲ τῷ τε ἄμφ’ αὐτὴν εὐρεθέντι πλούτῳ καὶ ὅτι πρὸς τὰς παρούσας οὐ πέπτωκε συμφορὰς ἀλλὰ τὸ φρόνημα πρὸς τὴν ἐξ ἀρχῆς ἀναφέρει τύχην. (Hel. Aeth. 1.20.1.1-5)

[Thyamis, leader of the bandits who have captured Chariclea and Theagenes, aims to marry Chariclea. He explains his decision to his brigands:] “I am content to rehearse to

⁴³ Note that this μὲν does not correlate with the underlined δέ, but with a δέ further on in the text (not cited here).

you also the causes that move me thus to do. First, she seems to me to be of good parentage; and I can guess this [*de*] both by the riches found about her, and because she is nothing broken with these adversities, but maintains a high spirit against her fortune from the beginning.”

(66) Οἷ γε κατὰ πᾶν μέρος τοῦ οὐρανοῦ γινόμενοι, καὶ ἀνατέλλοντες καὶ δυόμενοι καὶ τὸ μέσον ἐπέχοντες, ἴσοι πανταχόθεν τοῖς ἀνθρώποις προφαίνονται, ὅπερ ἀπόδειξιν ἔχει σαφῇ τῆς τοῦ μεγέθους περιουσίας, τῷ μηδὲν αὐτοῖς ἐπισημαίνειν τὸ πλάτος τῆς γῆς πρὸς τὸ μείζονας δοκεῖν ἢ ἐλάττονας εἶναι. Τὰ μὲν γὰρ πόρρωθεν ἀφεστῶτα μικρότερα πῶς ὁρῶμεν, οἷς δ' ἂν μᾶλλον ἐγγίσωμεν, μᾶλλον αὐτῶν τὸ μέγεθος ἐξευρίσκομεν. Τῷ δὲ ἡλίῳ οὐδεὶς ἐστὶν ἐγγυτέρω καὶ οὐδεὶς πορρωτέρω, ἀλλὰ ἀπ' ἴσου τοῦ διαστήματος τοῖς κατὰ πᾶν μέρος τῆς γῆς κατωκισμένοις προσβάλλει. Σημεῖον δὲ, ὅτι καὶ Ἴνδοι καὶ Βρεττανοὶ τὸν ἴσον βλέπουσιν. (Bas. *Hex.* VI.9.18-29)

[Basil is talking about the enormous size of the sun and the moon.] “In whatever part of heaven they may be, whether rising, or setting, or in mid-heaven, they appear always the same in the eyes of men, a manifest proof of their prodigious size. For the whole extent of heaven cannot make them appear greater in one place and smaller in another. Objects which we see afar off appear dwarfed to our eyes, and in measure as they approach us we can form a juster idea of their size. There is no one who can be nearer or more distant from the sun; it appears from the same distance for every inhabitant of the earth. A sign [*de*] for this is that Indians as well as Britons see it of the same size.”

These examples are interesting for a variety of reasons. One is that they again show that *δέ* occurs in contexts which are continuous and discontinuous – in this case, there is continuity in the sense that evidence is provided for the previously communicated assumption, and discontinuity in the sense that there is a transition between the assumption preceding *δέ* and the assumption providing evidence for this first assumption. The continuous component becomes clear in (64) in particular, where τῷ λόγῳ explicitly connects the *δέ* utterance to the preceding one – there, a λόγος was presented under which amber was the crystallized sap of plants. As such, there is a clear link between the *δέ* utterance and the preceding one. In (66), by contrast, ‘for this’ has to be added to the English translation of the *δέ* utterance to make clear the continuity with the preceding context. In Ancient Greek, *δέ* suffices to establish the link with the previous assumption. Again, there is obvious continuity here in that the *δέ* segment provides evidence for the previous utterance, but there is no explicit connection as there was in (64).

These examples are fascinating as well in that they seem to argue against the coherence view that δέ is a ‘neutral’ marker which connects discourse segments at the same level of the discourse hierarchy, while DMs such as γάρ and οὖν, which would mark transitions to lower and higher discourse levels, respectively.⁴⁴ In (64)-(66), δέ would, under a coherence approach, mark discourse segments with the rhetorical function of Evidence (cf. e.g. Mann et al. 1989: 12) – explicitly so, by dint of the semantics of the words in first position. Segments with the coherence relation of Evidence are communicatively subsidiary to the segment for which they provide evidence, on a coherence approach, and δέ would hence be able to mark utterances which are (a) not located at the same level of the discourse hierarchy as the previous one, and (b) are not ‘neutral’ but characterized by a coherence relation. On the relevance-theoretic view being developed here, however, these examples would be unproblematic – as a marker of continuity-within-discontinuity, there is no reason why δέ would not be able to mark utterances such as these. As in the other examples which have been discussed in this chapter, the δέ utterance relies on assumptions made manifest in the previous utterance(s), and indicates that these should be taken as a background against which the upcoming utterance will have to be interpreted. Μαρτυρεῖ (‘it testifies’), τεκμαίρομαι (‘I judge/estimate’) and σημεῖον (‘a sign’) do most of the heavy lifting in signaling that the upcoming utterance will offer evidence for the preceding assumption; the role of δέ in the process of deriving the correct explicature is in guiding the hearer down a certain inferential path in selecting the right context – namely, by indicating that the preceding utterance will provide the relevant context for interpreting the δέ utterance correctly. Without δέ, the utterance would be understandable – but δέ marks the upcoming utterance as communicating a separate assumption for which the hearer will have to select the preceding utterance as the contextual basis. In (65), for instance, the δέ utterance achieves relevance against the background of Chariclea’s ‘good parentage’ (εὐγενής); in (64), the straws and little animals (τὰ ἐμφαινόμενα κάρφη καὶ τὰ λεπτότατα τῶν ζώων) which can be found in amber have to be interpreted against the background of the assumption that amber is the crystallized sap of plants. The δέ utterance achieves relevance as a separate

⁴⁴ See Poythress (1984), Martín López (1993) and Black (2002: 164-6) on δέ as introducing background (and hence subsidiary) information (§3.1.1, §3.1.2). However, all three still focus mainly on δέ as a neutral connective – they not draw any larger implications from its use as a marker of background information, and they do not propose other subsidiary contexts in which it can appear.

assumption, but there is no contextual ‘clean slate’ – the previous utterance is still relevant as a contextual assumption in the interpretation process.⁴⁵

Δέ can also occur in reformulative contexts (see also (22) *supra*):

(67) οὐχ ὅσα λεπιδωτὰ, οὐχ ὅσα φολιδωτὰ, οὐχ οἷς ἐστι πτερύγια καὶ οἷς μή ἐστιν; Ἡ μὲν⁴⁶ φωνὴ τοῦ προστάγματος μικρὰ, μᾶλλον δὲ οὐδὲ φωνή, ἀλλὰ ῥοπή μόνον καὶ ὁρμή τοῦ θελήματος (Bas. Hex. VII.1.40-43)

[Basil is discussing ‘Let the waters produce moving creatures’, a verse from Genesis. He is arguing that this one command brought forth a tremendous variety in water creatures:] “Do we not see creatures which have a skin and those which have scales, those which have fins and those which have not? This command has only required a small expression, or rather [*de*] not even an expression, but a sign only, and a motion of the divine will.”

(68) «Ἐγὼ μὲν ἐπὶ τὰ ἐξῆς τῆς πράξεως ἄπειμι» ἔφην, «ὕμεις δέ με κατὰ χώραν περιμένειν τοῦ μή τισιν ὀφθῆναι πλείστην ὄσσην φροντίδα ἔχοντες»· καὶ εἰπὼν ἀπέτρεχον. Ἀλλ’ ἡ Χαρίκλεια θοιματίου τε ἐλαμβάνετο καὶ ἐπεῖχε καὶ «ἽΩ πάτερ, ἀδικίας» ἔλεγεν «ἀρχὴ τοῦτο μᾶλλον δὲ προδοσίας, εἰ μόνην οἰκίση με καταλιπὼν, Θεαγένει τὰ καθ’ ἡμᾶς ἐπιτρέψας, οὐδὲ ἐννοήσεις ὡς ἄπιστον εἰς φυλακὴν ἐραστής εἰ γένοιτο τῶν ἐρωτικῶν ἐγκρατὴς καὶ οὐχ ἥκιστα τῶν καταιδέσαι δυναμένων μονούμενος. (Hel. Aeth. 4.18.3.6-4.18.4.6)

[Calasiris is promising to help Theagenes and Chariclea. However, Chariclea is not sure of Theagenes’ intentions if they are left alone.] “I will go and dispatch the rest of our business. You wait for me in this place, and take utmost care that you are not seen by anyone.’ When I [i.e., Calasiris, SZ] had said this I was going away, but Chariclea caught me by the coat, and held me fast, and said: ‘Nay, father, of injustice is this the beginning, or rather [*de*] of betrayal, if you go away and leave me alone with Theagenes, not considering how unmeet a lover is to be the guardian, if it be in his power to enjoy that which he loveth, and there be absolutely no man there to make him ashamed thereof.”

(69) Καὶ οὐχ ἃ μὲν ἔπραττεν ἤδη, τοιαῦτα καὶ οὕτω πόρρω βασιλικῆς εὐγενείας καὶ μεγαλοπρεπείας· ἃ δὲ διανοεῖτο πράξειν, ἡμερώτερα τε καὶ βασιλικώτερα. Πολλοῦ μὲντ’ ἂν ἄξιον ἦν, εἰ μὴ πολὺ τῶν εἰρημένων ἀπανθρωπότερα. Ὡσπερ γὰρ δράκοντος

⁴⁵ For other similar examples, see e.g. Bas. Hex. VIII.5.18 (with σημεῖον δέ), Greg. Iul. I.552.25 and I.573.3 (with τεκμήριον δέ) and Hel. Aeth. 3.7.5.2 (with τεκμηριούτω δέ), 2.16.6.1 (with τοῦτο δὲ ὥδε συμβάλλω, ‘this I derive in this way’), 2.9.5.2 (τὴν δὲ αἰτίαν, ‘the reason is...’) and 6.5.4.6 (αἴτιον δέ, ‘the reason is...’).

⁴⁶ As in example (65), the underlined δέ does not form a correlative pair with this μὲν.

κινουμένου φολίδες, αἱ μὲν ἤδη φρίσσουσιν, αἱ δὲ ἐπιφρίσσουσιν, αἱ δὲ μέλλουσι, τὰς δὲ οὐκ ἔστι μὴ κινήθῃναι, κἂν ἡρεμοῦσαι τέως τυγχάνωσιν· εἰ βούλει δὲ, ὥσπερ κεραυνῶ, τὰ μὲν ἤδη κατέχεται, τὰ δὲ προμελαίνεται, μέχρις ἂν καὶ ταῦτα ἐπέλθῃ τοῦ κακοῦ δυναστεύοντος, οὕτω κάκείνῳ τὰ μὲν ἤδη παρηνομεῖτο, τὰ δὲ ὑπεγράφετο ταῖς ἐλπίσι καὶ ταῖς καθ' ἡμῶν ἀπειλαῖς. (Greg. *Iul.* I.628.35-629.8)

[Gregory is recounting the horrors wrought against the Christians by Julian. Yet he is also preparing his audience for the rest of his story:] “And it is not that the things he was already doing were of such a nature as I have described, and so far removed from the generosity and dignity of a sovereign, whilst those he was intending were more clement and more worthy of an emperor; it would have been a very good job if they did not prove far more inhuman than the actions already stated. As when a great serpent moves along some of its scales stand up on end, others half way, others are about to be similarly erected, whilst it cannot but be that the rest will in their turn be set in motion, even though at the moment they appear motionless; or, if [*de*] you will, as in a thunderstorm, part is already come down, part is blackening overhead, until this too shall come down when the mischief acquires the force sufficient. In the same way was it with him too – part of his wickedness had been already committed, part was being sketched out by his hopes and his threats against us.”

All of these examples are instances of reformulations in Cuenca & Bach's (2007: 149) sense:⁴⁷

“Reformulation can be defined as a process of textual reinterpretation: the speaker or writer re-elaborates a previous fragment of discourse presenting its contents in a different way. Reformulation is a complex discourse function by which the speaker re-expresses an idea in order to be more specific, [...]”⁴⁸

In the first two cases, δέ co-occurs with the adverb μᾶλλον, the comparative of the intensifier μάλα. As a comparative (‘rather’), it indicates that the upcoming utterance will be a better formulation than the previous one was.⁴⁹ In (69), the formulation εἰ

⁴⁷ See Verano (2015a: 498) on μᾶλλον δέ as marking reformulations. I have not found no previous research on εἰ βούλει (δέ).

⁴⁸ See Rossari (1994: 17), Del Saz Rubio & Fraser (2003: 8-9) and Cuenca & Bach (2007: 159-167) on different types of reformulation. Reformulation has been a topic of lively scholarly interest for some decades now – see Verano (2015b) for an overview of the most important research in this area.

⁴⁹ For other examples, see e.g. Bas. *Hex.* I.1.34, I.6.27, II.4.7, II.7.7, III.1.1; Greg. *Iul.* I.583.45, I.617.9, I.624.11, I.633.11, II.677.17, II.705.13; Hel. *Aeth.* 2.30.1.3, 2.31.4.7, 2.32.2.2, 4.5.3.7, 4.20.2.5, 5.20.3.6, 7.11.7.4, 9.6.6.3.

βούλει δέ does not suggest a better formulation, but an alternative one.⁵⁰ In all three cases, then, the δέ utterance communicates a reinterpretation of (part of) the previous utterance. Note, in this respect, that the most natural translation in all three instances involves representing δέ with disjunctive *or* in English, which has a widespread reformulative use (Blakemore 2007: 312):

(70) I keep thinking of my uncle Arthur, *or* rather my great-uncle Arthur, [...]

The similarities between (70) and (67) and (68) in particular are quite striking – ‘rather’, in (70), means the same thing as μάλλον does in (67)-(68). In order to describe how δέ functions in (67)-(69), I will apply the relevance-theoretic distinction between descriptive and interpretive use of language (Sperber & Wilson 1995²: 224-231; Ifantidou 2001: 90-95). By doing so, I will demonstrate that δέ still fulfills its usual function of marking continuity-within-discontinuity, but that it does so in a way which is unique among the almost 3000 examples of δέ I have collected.

Most utterances are used to describe a certain state of affairs in the language-external world. Language, in this sense, is used representationally: using the word ‘dog’ refers to a specific dog (or a species of dog, or the genus of dogs in general) in the ‘real world’ (Sperber & Wilson 1995²: 226). Utterances which are representational in this sense are ‘descriptive’:

(71) The dog had a snarl on his face, was barking furiously, and growled at me whenever I came near.

The speaker of (71) attempts to describe a rabid dog she came across – as such, the words she uses represent a certain state of affairs in the world.

However, language can also be used not to represent a state of affairs but to represent another representation. An utterance which is used in this way *interpretively resembles* the first-order representation – the speaker aims to produce an interpretation of another representation which it resembles in content (Ifantidou 2001: 91).⁵¹ (72) is a very simple example of the interpretive use of language (see Blakemore (2007: 318) for other examples):

⁵⁰ It should be noted that εἰ βούλει δέ occurs only three times in my corpus (example (69) included), all in Gregory (see also Greg. *Iul.* I.605.11 and I.629.3).

⁵¹ Cuenca & Bach (2007: 152) use the term ‘equivalence operation’ to refer to the process underlying interpretive resemblance (see also Cuenca 2003: 1071).

(72) a. Mary said: ‘The dog had a snarl on his face, was barking furiously, and growled at me whenever I came near.’

b. Mary said that she came across a rabid dog.

Both (72a) and (72b) are examples of interpretive use, but whereas (72a) contains an exact representation of someone else’s words, (72b) amounts to the speaker’s summary of Mary’s words (cf. Blakemore 1993: 105). Interpretive resemblance is a matter of degree, with exact paraphrases (or identity between the interpretively used utterance and the source utterance) on one end of the cline (Ifantidou 2001: 91-92; also Sperber & Wilson 1995²: 229). The choice of whether to represent another representation more or less exactly is driven by considerations of relevance – if the speaker of (72) was questioned by the police on Mary’s mysterious disappearance the night she was with the speaker, he might be more inclined to give as exact a paraphrase as possible (i.e., (72a)). In a different context, (72b) might be preferable – for instance, someone might have just told the speaker that he was having a bad day because they didn’t have his favorite snack at the supermarket. In that case, the speaker might utter (72b) in response, assuming that her interlocutor will derive the implicature that things could be worse.

Reformulations, by nature, point backwards to a previously communicated utterance (Rossari 1994: 9). Cross-linguistically, there is a tendency for languages to develop so-called ‘reformulation markers’ which indicate when the hearer should look for an interpretation which interpretively resembles a previously represented assumption⁵² – e.g. *alltså* in Swedish (Aijmer 2007: 54; Vaskó & Fretheim 1997); *enfin* and *c’est-à-dire* in French (Rossari 1994; Fløttum 1994); *dakle* in Croatian (Dedaic 2010); *dakara* in Japanese (Sasamoto 2008); and *in other words*, *or* and *that is* in English (Blakemore 1996; 2007; Tanaka 1997; Murillo 2004; Cuenca & Bach 2007). In Ancient Greek – at least in my corpus of texts –, reformulations can be introduced by *μᾶλλον δέ* and *εἰ βούλει δέ*. In (67), Basil first argues that God only needed a ‘small word’ (*φωνὴ μικρά*), then corrects himself and states that he actually needed ‘no word’ (*οὐδὲ φωνή*) but solely a ‘turning of the scales’ (*ῥοπή μόνον*) and an ‘impulse of his will’ (*ὁρμή τοῦ θελήματος*) to bring the water creatures into existence. In (68), Chariclea tries to convince Calasiris that his leaving her and Theagenes alone will not lead to injustice (*ἀδικίας*), but to betrayal (*προδοσίας*). (69), finally, is somewhat different – here, there is no correction. Instead, the utterance introduced by *εἰ βούλει δέ* offers an alternative comparison to Julian’s wickedness. Not only is it like a dragon who raises part of his scales and is planning on raising the rest, but it is also like a thunderstorm of which a part has already come

⁵² See Cuenca (2003: 1073) for references.

down, and another part is still threatening to come down. In this case, then, the second comparison is a reformulation of the first one in that they both present a comparison to the same basic assumption – namely, that part of Julian’s wickedness had already been displayed, but other transgressions still remained to be carried out.

It is important to underline here that the corrections in (67) and (68) are part of literary texts and, hence, planned (see Blakemore 1993: 118). Corrections occur often in everyday conversation (as in (70)), but the reformulations here are quite deliberate – Basil and Heliodorus mean to first provide a representation which is not quite in line with the information they aim to convey, and then correct this ‘mistake’ in the utterance marked by $\delta\acute{\epsilon}$. In other words, a deliberately sub-optimal representation is provided first, which is then rectified by the optimal representation – a corrective reformulation of the preceding representation. As such, it is obvious that the corrected utterance still achieves “overall relevance”, as Blakemore (1993: 119) calls it – even though it is eventually corrected by the $\delta\acute{\epsilon}$ utterance, the speakers still felt it relevant to include it in their texts. Its interpretation requires processing effort, for which the hearer expects to receive corresponding positive cognitive effects (see also Murillo 2012: 69). What would these effects be?

The use of comparative $\mu\acute{\alpha}\lambda\lambda\omicron\nu$ indicates that the $\delta\acute{\epsilon}$ utterance is more relevant than the preceding one, and that its content is better suited for communicating what the speaker means to convey (see Blakemore 2007: 326-327). Let’s take a look at (67) first. Here, Basil argues that God’s command ‘Let the waters bring forth moving creatures’ was a ‘small expression’, before reinterpreting it as ‘not even an expression’, but a ‘turning of the scales’ or ‘motion’ of ‘divine will’. This latter interpretation may seem strange – the verse from Genesis which Basil is discussing includes $\epsilon\acute{\iota}\pi\epsilon\nu$ (‘he said’). By first presenting it as a ‘small expression’, Basil aims to provide a context in which the assumption that God did not actually utter anything, seems more plausible. As in the other examples of $\delta\acute{\epsilon}$ discussed in this chapter, the preceding utterance, then, functions as the background against which the $\delta\acute{\epsilon}$ utterance is interpreted – even if Basil corrects the original assumption with the $\delta\acute{\epsilon}$ utterance, the original assumption will linger in the audience’s mind and will influence the interpretation of the $\delta\acute{\epsilon}$ utterance in what can be called a two-step process. In the first step, God’s command is presented as a ‘small expression’ – with the implicature attached that such a minimal utterance managed to lead to the creation of a wide variety of different sea creatures. If this assumption is accepted, then the second step of the process – that God actually didn’t need *any* expression to create this variety – will not seem as strange. If God is so powerful that he could create such variety with so little words, it becomes more conceivable that he didn’t need any words. Although the original assumption needs to be scratched, then, it still has an important function in establishing a yardstick for the interpretation of the correct assumption. Against the background of the corrected assumption, the correct assumption yields additional positive cognitive effects – God’s powers would have been

impressive if he had only needed a ‘small expression’, but now that we know that he actually needs *no* words, his absolute might becomes even more salient.

(68) works similarly. Chariclea first presents Calasiris’ plan as being the start of an ‘injustice’, then corrects herself and argues that it is, in fact, the start of a ‘betrayal’. As we are still dealing with literary, planned discourse, the corrected assumption needs to produce some positive cognitive effects – otherwise, Heliodorus could have just had Chariclea say that it was the ‘start of a betrayal’, without ever mentioning an ‘injustice’. Again, the first assumption provides a context against which the correct assumption yields additional positive cognitive effects – Calasiris does not commit an ‘injustice’, which would have been bad enough, but a ‘betrayal’, which is a particularly nasty act of injustice. With the addition of the correction in the $\delta\acute{\epsilon}$ utterance, the nondescript ‘injustice’ referred to in the corrected utterance does not seem so bad. Conversely, the ‘betrayal’ in the $\delta\acute{\epsilon}$ utterance seems even worse by comparison with the ‘injustice’ in the preceding utterance. If someone commits an injustice, he’s a bad guy – but if he commits not an injustice, but a *betrayal*, he’s a *really* bad guy. In that sense, the ‘injustice’ lingers in the audience’s mind, as the ‘small expression’ did in (67) – it is the yardstick against which the subsequent ‘betrayal’ is measured, and against which this betrayal becomes particularly reprehensible. As in (67), the corrected assumption influences the interpretation of the $\delta\acute{\epsilon}$ utterance, and leads to additional positive cognitive effects.⁵³

Example (69) is different from (67) and (68). In this case, the $\delta\acute{\epsilon}$ utterance does not offer a correction, and the assumption communicated in the utterance preceding $\delta\acute{\epsilon}$ is not disregarded. Instead, the $\delta\acute{\epsilon}$ utterance provides a comparison for another assumption, just as the utterance preceding $\delta\acute{\epsilon}$ does. The crucial distinction between (67) and (68) on the one hand and (69) on the other is that, in (69), both the $\delta\acute{\epsilon}$ utterance and the preceding one are equally relevant – there is no comparative $\mu\acute{\alpha}\lambda\lambda\omicron\nu$ to signal the relative degree of relevance between the two utterances (see Blakemore 2007: 326–327; Murillo 2012: 69).

The $\delta\acute{\epsilon}$ utterance provides a reformulation of the first comparison – whereas the previous comparison involved the scales of dragons, this one has to do with the blackening of the sky during thunderstorms. The way in which the second comparison

⁵³ It is interesting to note Mercier’s (2012: 315) discussion of an experiment performed by Tversky & Kahneman (1974). “In an oft-cited experiment, participants were given a random number from 1 to 100 (the anchor) and this influenced their later answer to the question ‘how many countries are there in Africa?’ [...] [It has been] argued that this effect is mediated by an increase in the accessibility of anchor consistent knowledge: participants will think first of arguments that are consistent with the anchor”. In (67) and (68), the assumption communicated in the utterance preceding $\delta\acute{\epsilon}$ can be regarded as an ‘anchor’ in this sense, influencing the interpretation of the subsequent utterance. The parallel is not perfect, but I think there is one there.

is introduced is interesting as well. It is obviously hearer-oriented, βούλει being second person singular, and it has intriguing cross-linguistic parallels in English *if you will* and *if you like*:

(73) a. It's relaxation; another form of meditation, if you will.

b. I'm not sure if I have the confidence, the nerve if you like [...] to apply for the job.⁵⁴

The *Macmillan Dictionary* explains the use of *if you will* in (73a) as an expression “used when describing something in an unusual way or in a way that you think someone might not agree with”. In the example, ‘relaxation’ is reformulated as ‘another form of meditation’; (73b) is very similar in that ‘confidence’ is reformulated by ‘nerve’. As with εἰ βούλει, the speaker seems to shift responsibility to the hearer in determining whether or not to accept the reformulation – or, at least, that may be how the expression originally came to be. At the same time, the speaker must think that the reformulation must be worth the hearer’s trouble in processing it – there would be no point in producing an utterance which you think will yield no positive cognitive effects.

The reformulation introduced by εἰ βούλει δέ is a clear-cut instance of how reformulations do not equal identity, and rely, in large part, on pragmatic inference. There are many more aspects in which a dragon raising his scales is *not* similar to a darkening sky during a thunderstorm, but, in this context, there is also a shared characteristic – in both cases, part of the process has already occurred, while the other part is stirring still. The similarity becomes more pronounced because the assumption which underlies the two comparisons is made explicit beforehand: Julian had already committed part of his transgressions, but others remained. The order of assumptions in (69) is then as follows: first, we get the ‘source’ assumption (i.e., the assumption which provides the source for the upcoming comparisons) – Julian’s next actions were even more inhumane than the previous ones. Then, we get the first (dragon) comparison, followed by the second, thunderstorm one (introduced by δέ); finally, we get the apodosis of the comparative clause, which recaps the source assumption. As such, δέ marks a reformulation of a reformulation, and thus second-order interpretive use. By reformulating the comparison, Gregory elucidates how both the original (dragon) comparison and the new (thunderstorm) comparison are similar to Julian’s wickedness – with the addition of the δέ utterance (i.e., by using two comparisons for the same

⁵⁴ The first example is from the online version of the *Macmillan Dictionary* (<http://www.macmillandictionary.com/dictionary/british/if-you-will>), the second is from the *Cambridge Advanced Learner’s Dictionary & Thesaurus* (<http://dictionary.cambridge.org/dictionary/english/if-you-like>). Both were accessed on the 29th of April, 2016.

situation), it becomes even more clear that the most important *tertium comparationis* between the dragon raising his scales, the thunderstorm and Julian's transgressions is concerned with how part of a (negative) process can be over and done with, while another part still threatens more action. Both comparisons generate negative implicatures associated with dragons and thunderstorms, and relate them to Julian – the two together strengthen the negative image of Julian which Gregory has been building throughout his invectives.

According to Blakemore (2007), there are two types of reformulation – one is 'metaconceptual', the other 'metalinguistic'. The former are reformulations in their 'standard' sense, applying to instances where a reformulation communicates a proposition about the content represented in the previous utterance. (67) and (69) are examples of metaconceptual reformulations, communicating an alternative way of representing the content of the preceding utterance – in the case of (67), the δέ utterance replaces the earlier content ('small expression' becomes 'no expression but a turning of the scales and impulse of divine will'); in the case of (69), the δέ utterance establishes an alternative comparison which expresses the same idea as the previous one. In both cases, the δέ utterance provides another way of looking at the thought the speaker aims to communicate – either because the earlier way wasn't exactly correct (67) or because it offers another point of view (69).

Example (68) is different. As Blakemore (2007: 329) argues, reformulations can be used metalinguistically to express other words which "can be used to communicate the concept" which the speaker wants to convey. Put differently, metaconceptual reformulations are about interpreting another conceptual representation, while metalinguistic reformulations are about the words which can be used to refer to concepts. In (68), προδοσίας is a better word to express what Chariclea means to say than ἀδικίας due to its being more specific than the more ambiguous ἀδικίας (see Cuenca 2003: 1071-1072; Cuenca & Bach 2007: 162; Blakemore 2007: 328; Murillo 2012: 77) – Calasiris' plan to leave is not the start of just some 'injustice', but of a 'betrayal' (as discussed *supra*). In other words, προδοσίας is, in Chariclea's estimation⁵⁵, a better approximation of the concept she wants to communicate than ἀδικίας, and she marks it as such by using μάλλον δέ. In (67) and (69), by contrast, there is no word which expresses the speaker's assumption better or differently; instead, another conceptual representation replaces or complements the previous one.⁵⁶

⁵⁵ Technically, Heliodorus' estimation of what Chariclea would say.

⁵⁶ See Blakemore (2007: 325-329) for discussion of the metaconceptual-metalinguistic distinction. For other examples of metalinguistic μάλλον δέ, see Bas. *Hex.* III.1.1 (where τῆς πρώτης (ἡμέρας) ('the first (day)') is replaced with τῆς μιᾶς ('one [day]')), Hel. *Aeth.* 2.32.2.2 (where ἐξώρμησε ('he had departed') is replaced with

It is important to underline that, following Blakemore (1996: 340) and Murillo (2004: 2066), *μᾶλλον δέ* and *εἰ βούλει δέ* always introduce a higher-level explicature (see §2.3.2.2) which indicates that the utterance it marks should be taken to be an instance of interpretive use:

(68') ἀδικίας ἀρχὴ τοῦτο μᾶλλον δὲ προδοσίας.

'This is the beginning of injustice, or rather of betrayal.'

The *δέ* utterance communicates the following (higher-level) explicature:

(68'') Chariclea believes that *προδοσίας* is a more faithful representation of the concept she is trying to convey than *ἀδικίας*.

The first part of (68') could also be embedded under a higher-level explicature, of course, but it would be of a different sort:

(68''') Chariclea believes that this is the beginning of injustice.

On this view, *δέ* would still mark a fully propositional assumption – more specifically, an assumption which is marked by *μᾶλλον* as being a reformulation.

(67) works very similarly:

(67') Ἡ μὲν φωνὴ τοῦ προστάγματος μικρὰ, μᾶλλον δὲ οὐδὲ φωνή, ἀλλὰ ῥοπή μόνον καὶ ὁρμή τοῦ θελήματος.

'This command has only required a small expression, or rather not even an expression, but a sign, a motion of the divine will.'

This instance conveys two separate explicatures as well:

(67'') a. Basil believes that God's expression for 'Let the waters bring forth moving creatures' was small.

b. Basil believes that 'God did not even use an expression, but a turning of the scales and an impulse of his will' is a more faithful representation of the conceptual representation he is trying to convey than 'God's expression for 'Let the waters bring forth moving creatures' was small'.

ἐξελήλαται ('he had been expelled')) and 4.20.2.5 (where οἰκτιζόμενοι ('pitying ourselves') is replaced with γυναικίζόμενοι ('playing the woman's part')).

Basil has information in mind which he wants to share with his audience, and the first utterance does not really capture the conceptual representation he is trying to convey. As such, he adds the second utterance and marks it via *μᾶλλον* as being a correction (and, hence, a reformulation) of the preceding utterance. The second utterance, then, achieves relevance as an interpretation of the previous one; at the same time, *μᾶλλον* encodes the information that the preceding utterance is not the optimal way of conveying the conceptual representation the speaker has in mind.

(69) is somewhat different (it is repeated here for convenience):

(69) Καὶ οὐχ ἃ μὲν ἔπραττεν ἤδη, τοιαῦτα καὶ οὕτω πόρρω βασιλικῆς εὐγενείας καὶ μεγαλοπρεπείας· ἃ δὲ διενοεῖτο πράξειν, ἡμερώτερα τε καὶ βασιλικώτερα. Πολλοῦ μὲντ' ἂν ἄξιον ἦν, εἰ μὴ πολὺ τῶν εἰρημένων ἀπανθρωπότερα. Ὡσπερ γὰρ δράκοντος κινουμένου φολίδες, αἱ μὲν ἤδη φρίσσουσιν, αἱ δὲ ἐπιφρίσσουσιν, αἱ δὲ μέλλουσι, τὰς δὲ οὐκ ἔστι μὴ κινηθῆναι, καὶν ἡρεμοῦσαι τέως τυγχάνωσιν· εἰ βούλει δὲ, ὥσπερ κεραυνῶ, τὰ μὲν ἤδη κατέχεται, τὰ δὲ προμελαίνεται, μέχρις ἂν καὶ ταῦτα ἐπέλθῃ τοῦ κακοῦ δυναστεύοντος, οὕτω κάκείνῳ τὰ μὲν ἤδη παρηνομεῖτο, τὰ δὲ ὑπεγράφετο ταῖς ἐλπίσι καὶ ταῖς καθ' ἡμῶν ἀπειλαῖς. (Greg. *Iul.* I.628.35-629.8)

[Gregory is recounting the horrors wrought against the Christians by Julian. Yet he is also preparing his audience for the rest of his story:] “And it is not that the things he was already doing were of such a nature as I have described, and so far removed from the generosity and dignity of a sovereign, whilst those he was intending were more clement and more worthy of an emperor; it would have been a very good job if they did not prove far more inhuman than the actions already stated. As when a great serpent moves along some of its scales stand up on end, others half way, others are about to be similarly erected, whilst it cannot but be that the rest will in their turn be set in motion, even though at the moment they appear motionless; or, if [de] you will, as in a thunderstorm, part is already come down, part is blackening overhead, until this too shall come down when the mischief acquires the force sufficient. In the same way was it with him too – part of his wickedness had been already committed, part was being sketched out by his hopes and his threats against us.”

The difference with the two previous examples is that the first comparison is already an interpretation of another assumption (the source assumption, paraphrased here):

(69') a. Gregory believes that Julian's next actions were even more inhumane than the preceding ones.

This assumption is reformulated by way of a comparison (it is marked as a reformulation by ὥσπερ):

(69') b. Gregory believes that 'a great serpent moves along while some of its scales stand up on end, others half way, others are about to be similarly erected, whilst it cannot but be that the rest will in their turn be set in motion, even though at the moment they appear motionless' is a faithful representation of the conceptual representation conveyed by (69'a).

This comparison is then reformulated by way of another comparison, introduced by εἰ βούλει δέ:

(69') c. Gregory believes that 'in a thunderstorm, part is already come down, part is blackening overhead, until this too shall come down when the mischief acquires the force sufficient' is a faithful representation of the conceptual representation conveyed by 'a great serpent moves along while some of its scales stand up on end, others half way, others are about to be similarly erected, whilst it cannot but be that the rest will in their turn be set in motion, even though at the moment they appear motionless', as well as the conceptual representation in (69'a).

Note also, again, that the comparisons are not perfectly faithful *vis-à-vis* the primary assumptions, nor are they perfectly faithful towards each other – the way in which a dragon raises its scales is not completely similar to the way in which a thunderstorm is divided into a part which has come down and a part which threatens to come down. The ways in which they are similar to each other and to the primary assumption (the 'comparison-relevant content', in Gargani's (2014, 2016) terms), have to be derived pragmatically by the hearer on the basis of the semantically encoded information, his inferential abilities and his store of encyclopaedic knowledge about the world. This is where δέ plays an important role – it indicates that the previously communicated assumption remains relevant as a background assumption for the interpretation of the upcoming utterance. Put differently, δέ occurs in contexts which are clearly reformulative, but it does not indicate that a reformulation is coming – it still functions as it did in the previous examples, signaling both contextual continuity and discontinuity. There is, for instance, clear discontinuity between the two assumptions communicated in (68), but there is still also continuity – especially syntactically, as προδοσίας depends on ἀρχὴ τοῦτο in the preceding utterance. There is also clear continuity in (67), for which the οὐδὲ φωνή still refers to the φωνή which God used to utter his προστάγμα, made explicit in the utterance preceding δέ. In (69), the continuity is more semantic and pragmatic than syntactic – as discussed above, the two comparisons both involve the same *tertium comparationis* and are, as such, linked due to the fact that they offer different comparisons for the same assumption.

In sum, there is no reason to suppose that *δέ* performs anything other than its usual continuity-within-discontinuity function in (67)-(69) – most of the heavy lifting in marking the utterances as reformulations is done by *μᾶλλον* and *εἰ βούλει*, respectively.⁵⁷ This becomes apparent when *μᾶλλον* is deleted from e.g. (68’):

(68’’) ἀδικίας ἀρχὴ τοῦτο προδοσίας δέ.

‘This is the beginning of injustice, and of betrayal.’⁵⁸

Without *μᾶλλον*, there is no reformulation, and Chariclea would communicate the assumptions that Calasiris’ plan is the beginning of injustice, and the beginning of betrayal – in other words, we would get an addition here, not a correction. However, *δέ*’s function in (68’’) is no different than it is in (68’) – it still indicates that the preceding context remains relevant as the background against which a new assumption has to be interpreted.

Reformulations, in fact, harmonize perfectly with the function I have proposed for *δέ* – they present, at their most basic level, an alternative way of looking at the same content (see the definition of Cuenca & Bach (2007: 149) *supra*) and, hence, a form of continuity-within-discontinuity. Although the translations seem to point to a difference between (67)-(69) and the other examples discussed in this chapter (*δέ* being represented by ‘or’ in the translation of these instances but not in the previous ones), this does not mean that, for a Greek-speaking hearer in the 4th century A.D., these *δέ*’s are distinct from others.

Under a coherence approach, examples like (67)-(69) would fit in with (64)-(66) in that they seem to present problems for an analysis of *δέ* under which it connects (and at the same time separates) discourse segments at the same level of the discourse hierarchy (see e.g. Bakker 1993). More to the point, *δέ* can, on a coherence view, mark discourse segments with the Evidence coherence relation (as in (64)-(66)) or the Explanation coherence relation (as in (35)), but also Reformulations and/or Corrections.⁵⁹ I have already pointed to the difficulties inherent in such an approach,

⁵⁷ Note, in this regard, the position of *δέ* in *εἰ βούλει δέ*. Following Wackernagel’s Law (see footnote 1 in §1), *δέ* always occurs in second position – as such, we would expect *εἰ δὲ βούλει*. The fact that *δέ* is located in ‘third’ position, seems to warrant the conclusion that *εἰ βούλει*, in these types of reformulative contexts at least, was felt to be a single prosodic and informational unit – *δέ* would then still be located in second position, behind the collocation [*εἰ βούλει*]. This might mean, in turn, that *εἰ βούλει*, in contexts like (69), may function as a grammaticalized marker of higher-level explicatures (i.e., reformulations).

⁵⁸ As noted *supra*, *δέ* cannot occur in first position in an utterance/segment, which is why *προδοσίας* is placed before *δέ*.

⁵⁹ In this respect, see also Verano (2015b) on *λέγω δέ* (‘I mean...’) and *ἔστιν δέ* (‘that is...’) as examples of contexts in which *δέ* occurs with reformulations.

but they become even more pronounced here. As I have pointed out in the preceding chapter, there is no agreement on how the Reformulation relation should be construed – according to Hovy (1990: 131), Restatement is a form of the Elaboration relation, while Hobbs (1985: 18) argues for the exact opposite; Mann et al. (1989: 53) regard Restatement as a separate relation altogether (see also Blakemore 2007: 317). Even leaving aside the matter of where we should locate the Reformulation (or Restatement) relation in the ecology of coherence relations, it seems strange that a single DM (δέ) would be able to mark central discourse segments, Explanations, Reformulations and Evidence. This has, to my knowledge, never been discussed in earlier accounts of δέ. On a RT view, which does not assume that deriving coherence relations is crucial for utterance understanding, examples such as (35), (64)-(66) and (67)-(69) are easy to explain – in all of these cases, δέ's function lies in helping the speaker's audience select the right contextual assumptions for interpreting the upcoming utterance, while at the same time marking the upcoming utterance as communicating a separate assumption.

The reason why I have devoted so much attention to δέ in reformulations, is twofold. First, there has been very little academic interest in reformulation markers in Ancient Greek (with the notable exception of Verano 2015a). Second, μάλλον δέ and εἰ βούλει δέ provide a relevant case study for several aspects of δέ's meaning which I have been highlighting – its non-compositionality, the non-viability of a coherence approach, and the continuity-within-discontinuity hypothesis, which I think is at the heart of the procedural rule δέ encodes.

Up to this point, I have looked almost exclusively at 'solitary δέ', as Bakker (1993) calls it. However, δέ is often preceded by the DM μὲν. In the next paragraph, I will analyze δέ as it co-occurs with μὲν – my discussion will demonstrate that there is no functional difference between a δέ which appears on its own and a δέ which co-occurs with μὲν. If there is any distinction, this is due to μὲν's meaning, and not δέ's.

3.2.3.4 On the μὲν-δέ pair: against a contextually tailored approach to δέ's meaning

Recall that Bakker (1993) distinguished between two uses of δέ with μὲν. One of these involved what he calls 'complementation', but which might be more straightforwardly designated as 'contrast'. There are many instances of μὲν-δέ in contrastive contexts in my corpus:

(74) Πρῶτον μὲν οὖν ἐκεῖνο αὐτοὺς ἐρωτήσωμεν, εἰ μὴ ἔφ' ἐκάστης ἡμέρας μυριάκις ἀμείβεται τῶν ἀστέρων τὰ σχήματα; Ἀεικίνητοι γὰρ ὄντες οἱ πλανῆται λεγόμενοι, καὶ οἱ μὲν θάττον ἐπικαταλαμβάνοντες ἀλλήλους, οἱ δὲ βραδυτέρας τὰς περιόδους ποιοῦμενοι, ἐπὶ τῆς αὐτῆς ὥρας πολλάκις καὶ ὁρῶσιν ἀλλήλους καὶ ἀποκρύπτονται. (Bas. Hex. VI.7.6-12)

[Basil is refuting the pagans who believe that morality is influenced by the location and movement of celestial bodies:] “I would first ask them this: if the figures which the stars describe do not change a thousand times each day. In the perpetual motion of what are called planets, some [*men*] meet in a more rapid course, others [*de*] make slower revolutions, and often in the same hour we often see them both look at each other and then hide themselves.”

(75) ὃν τότε μὲν ἡ πορφυρὶς μέγαν ἐποίει, καὶ οἱ πάντα τὰ σὰ θαυμάζοντες κόλακες· νῦν δὲ πώγων ἐστὶ περιφερόμενος καὶ περισυρόμενος, καὶ τοῖς συμπεπονηκόσιν ὁμοῦ γελῶμενος. (Greg. *Iul.* 717.21-25)

[Gregory is pouring scorn on the Misopogon (literally, the ‘Beard-hater’), a satire of philosophers written by Julian:] “At the time [*men*] thy imperial rank made it important, aided by the parasites that extolled all your actions; but now [*de*] it is a beard tossed about and plucked at, and the object of ridicule together with those that helped make it.”

(76) Καὶ ἡσυχίαν παρασχεῖν τῇ δεσποίνῃ τοὺς παρεδρεύοντας κελεύσασα καὶ μὴ παρενοχλεῖν τοῖς περὶ τὸν θάλαμον, παρεισήγε τὸν Θεαγένην, τῶν μὲν ἄλλων οἷα δὴ νυκτὸς ὑπὸ σκότους κατεχομένων καὶ λαθεῖν παρεχόντων μόνον δὲ τὸν θάλαμον λύχνου καταυγάζοντος, καὶ εἰσάγουσα ὑπέστελλεν ἑαυτήν. (Hel. *Aeth.* 7.26.1.4-9)

[Arsace, the wife of Oroondates, is in love with Theagenes. She has charged her servant Cybele to convince Theagenes to lie with her.] “After Cybele had charged the attendants to be still and let Arsace rest without stirring about the chamber, she conveyed Theagenes in privily; every other place [*men*] was very dark, so that one might work secretly enough, and Arsace’s chamber alone [*de*] was illuminated by a lamp.”

The contrast is quite obvious in these examples. In (74), the planets who are quicker (θᾶττον) in their course are contrasted with those who are slower (βραδυτέρας); in (75), the value attached to Julian’s Misopogon has shifted from when he was alive (‘then’, or τότε) to ‘now’ (νῦν), and both assessments are contrasted by Gregory. In (76), Arsace’s chamber is contrasted with other rooms in the palace in that hers alone (μόνον) was illuminated.⁶⁰

The other use of μέν-δέ proposed by Bakker is the ‘transition’ use, where μέν marks the “closing statement of the previous thematic” section, and δέ marks the transition to

⁶⁰ For contrast with μέν-δέ, see also e.g. Bas. *Hex.* I.4.7, II.8.2-5, VI.3.69-71 and VI.7.21-23; Greg. *Iul.* I.556.38-39, I.560.4-5 and II.700.20-25; Hel. *Aeth.* 3.4.6.2-3, 5.5.3.5-7, 7.10.2.3-4 and 8.6.4.3-3.

a new one (1993: 302). Again, there are several examples of this use in my corpus of texts:

(77) Ὅπου γὰρ ἀνάγκη καὶ εἰμαρμένη κρατεῖ, οὐδεμίαν ἔχει χώραν τὸ πρὸς ἀξίαν, ὃ τῆς δικαιοκρισίας ἐξαίρετόν ἐστι. Καὶ πρὸς μὲν ἐκείνους, ἐπὶ τοσοῦτον. Οὕτε γὰρ ὑμεῖς πλειόνων δεῖσθε λόγων παρ' ἐαυτῶν ὑγιαίνοντες, ὃ τε καιρὸς οὐκ ἐνδίδωσι πέρα τοῦ μέτρου πρὸς αὐτοὺς ἀποτείνεσθαι. Πρὸς δὲ τὰ ἐξῆς τῶν ῥημάτων ἐπανέλθωμεν. Ἔστωσαν, φησὶν, εἰς σημεῖα, καὶ εἰς καιροὺς, καὶ εἰς ἡμέρας, καὶ εἰς ἐνιαυτούς. (Bas. Hex. VI.7.58-VI.8.3)

[Basil is still arguing (see ex. (74)) that morality cannot be influenced by celestial bodies:] “Under the reign of necessity and of fatality there is no place for merit, the singular condition for all righteous judgment. And as to [*men*] these words, we will stop here. You who are sound in yourselves have no need to hear more, and time does not allow us to make attacks without limit against these unhappy men. Let us return to [*de*] the words which follow. ‘Let them be for signs and for seasons and for days and years.’”

(78) τί θαυμαστόν, εἰ μηδὲ τὴν ἐκείνου τιμὴν προσεδέξατο πονηρῶς τε καὶ μετὰ πονηρᾶς τῆς διανοίας προσαγομένην, ὃ μὴ καθορῶν ὡς ἄνθρωπος, μηδὲ εἰς τὸ φαινόμενον βλέπων, ἀλλ' εἰς τὸν κρυπτὸν ἄνθρωπον, καὶ εἰς τὸ ἔνδον τῆς κακίας ἢ τῆς ἀρετῆς ἐργαστήριον; Τοῦτο μὲν δὴ τοιοῦτο· καὶ εἴ τις ἀπιστεῖ, τοὺς τεθεαμένους αὐτοὺς ἐπιμαρτυρόμεθα· πολλοὶ δὲ εἰσιν, οἳ καὶ ἡμῖν καὶ τοῖς ἔπειτα τὸ θαῦμα τοῦτο παρέπεμψάν τε καὶ παραπέμψουσιν. Ἐπεὶ δὲ εἰς ἄνδρας προϊόντες ἤδη τῶν ἐν φιλοσοφίᾳ δογμάτων ἤψαντο (ὡς μήποτε ὠφελον!) καὶ τὴν ἐκ τοῦ λόγου προσελάβανον δύναμιν, ἢ τοῖς μὲν ἐπιεικέσιν ἀρετῆς ὄπλον, τοῖς δὲ μοχθηροτέροις κέντρον κακίας γίνεται, οὐκέτι κατέχειν ὅλην τὴν νόσον οἷός τε ἦν [...]. (Greg *Iul.* 556.24-41)⁶¹

[Gregory is recounting how both Julian and his brother were building edifices in honor of God – but while those of his brother were completed, those constructed by Julian were destroyed by natural forces.] “What wonder, then, if He did not accept honour from that man, offered in bad manner and from a bad motive – He that seeth not as man seeth, nor looketh at the outward appearance, but at the hidden man, and the inward workshop of virtue or of wickedness? So much for this [*men*]; and if anyone is incredulous, we call in evidence those that beheld the fact – and they are numerous, those who have delivered down the miracle to us, and will deliver it down to those who come after. When [*de*], as the two now advanced to man's estate, they began to handle

⁶¹ Note also the contrastive context in which the μὲν-δέ pair at the end of this example is used: τοῖς μὲν ἐπιεικέσιν ἀρετῆς ὄπλον, τοῖς δὲ μοχθηροτέροις κέντρον κακίας γίνεται (‘... which to the good is the weapon of virtue, but to the ill-conditioned the incentive to vice’).

the doctrines of philosophy (which I wish they had never done!), and were deriving that power from words which to the good is the weapon of virtue, but to the more ill-conditioned the incentive to vice, this man was no longer able to restrain his disease in every part; [...].”

In both examples, μέν introduces a segment which metadiscursively closes off the previous segment. In (77), δέ introduces a metadiscursive segment as well – Basil indicates that he will return to the next part of Genesis (as such, (77) is similar to (13)). In (78), Gregory marks a transition between the part of Julian’s life in which he showed outward piety, and that part in which he went on to show his true, pagan colors. Here, δέ marks a transition to a new part of Gregory’s story without the metadiscursivity of (77) – but the transition is still there, of course.⁶²

What is special about μέν is that it points forward – δέ, just like γάρ and οὖν, points backwards, separating the upcoming assumption from the previous one and indicating that the preceding contextual assumptions are still relevant. This is crucial to understanding why it occurs with δέ so frequently. In many cases, it is clear that assumptions made available in the utterance marked by μέν are relevant for interpreting the utterance marked by δέ:⁶³

(79) Ἐντεῦθεν διαδεξαμένη ἡμᾶς τοῦ μετοπώρου ἡ ὥρα, ὑποθραύει μὲν τοῦ πνίγους τὸ ὑπερβάλλον, κατὰ μικρὸν δὲ ὑφιεῖσα τῆς θερμῆς, διὰ τῆς κατὰ τὴν κρᾶσιν μεσότητος ἀβλαβῶς ἡμᾶς δι’ ἑαυτῆς τῷ χειμῶνι προσάγει. (Bas. *Hex.* VI.8.46-9)

[Basil is discussing how the sun influences the different seasons.] “Next we pass to autumn, which breaks up [*men*] the excessive heat, and [*de*] by lessening the warmth little by little, brings us back, through itself, by a moderate temperature to winter without suffering.”

(80) τὰ σώματα κάμνοντα μὲν ταῖς θεραπαίαις ἀναφέρει καὶ ταῖς ἐνδείαις, ἀνενεγκόντα δὲ ταῖς κατὰ μικρὸν ἀμελείαις καὶ ταῖς πλησμοναῖς, πάλιν ὑπορρεῖ, καὶ πρὸς τὰς αὐτὰς ἀρρωστίας ἐπάνεισι. (Greg. *Iul.* II.708.30-34)

[Gregory is comparing piety and discipline to the physical well-being of bodies:] “Our bodies, when diseased [*men*], recover through strict diet and fasts, but when recovered [*de*] they fall back through gradual careless living and surfeiting, and tumble again into the same maladies.”

⁶² For other examples, see e.g. Bas. *Hex.* I.6.33-7.1, VI.7.61-8.1 and VII.6.67; Greg. *Iul.* I.537.18-24, I.608.26-39 and II.669.10-12; Hel. *Aeth.* 3.4.5.1-2, 7.28.1.1 and 10.1.1.1-4.

⁶³ For other examples, see e.g. Bas. *Hex.* IV.7.1-11 and IX.4.23-29; Greg. *Iul.* II.681.5-14 and II.681.26-35; Hel. *Aeth.* 1.18.3.6-1.18.4.6, 4.3.3.1-5 and 9.9.1.1-9.9.2.6; 3.3.2.1-2 is very similar to (81) *infra*.

(81) Οἱ τε γὰρ ἵπποι πρὸς τὸ ἄηθες τῆς τῶν ἐλεφάντων ὄψεως ἀθρόον παραγυμνωθείσης καὶ τῷ μεγέθει [ξενίζοντι τῆς θέας] τὸ φοβερὸν ἐπιφερούσης οἱ μὲν παλινδρομοῦντες οἱ δὲ ἐν ἀλλήλοις συνταραττόμενοι τὴν τάξιν τῆς φάλαγγος τάχιστα παρέλυσον· οἱ τε ἐπὶ τῶν ἐλεφάντων κατὰ τοὺς πύργους (ἕξ μὲν ἕκαστον κατειληφότες δύο δὲ κατὰ πλευρὰν ἐκάστην ἐκτοξεύοντες, τῆς ἐπ’ οὐρὰν μόνης εἰς τὸ ἄπρακτον σχολαζούσης) οὕτω δὴ τι συνεχές τε καὶ ἐπίσκοπον ὥσπερ ἐξ ἀκροπόλεως τῶν πύργων ἔβαλλον ὥστε εἰς νέφους φαντασίαν τὴν πυκνότητα παραστήναι τοῖς Πέρσαις, [...]. (Hel. Aeth. 9.18.4.1-9.18.5.7)

[The Persians and Ethiopians are doing battle at Syene. The Persian cataphracts are attacking the Ethiopian elephants:] “Their horses, being afraid of the strangeness of the sight of the elephants, suddenly revealed, and [surprised at] their magnitude, either turned back or ran aside, and caused the main battle to break its array. They who were upon the watch towers on the elephants — six men [*men*] upon each, two [*de*] shooting arrows from every side save the behind, which wasn’t being used — shot so steadily and at the mark from their tower as from a castle, that the number of their arrows was to the Persians like a cloud; [...].”

In example (79), the assumption communicated in the μὲν utterance (‘autumn breaks up the excessive heat’) is recapped in the first part of the δέ utterance (‘after it has decreased the heat little by little, ...’) as the basis on which the rest of the δέ utterance builds. This is reminiscent of the δέ utterances in (41)-(44) – there, the subordinate clauses (either temporal or genitive absolutes) also summarized the assumption(s) communicated in the preceding utterance. The same is true for (80): here, the previous utterance is recapped through the participle ἀνενεγκόντα. This is the aorist participle of ἀναφέρω – of which ἀναφέρει, which is the predicate of the preceding utterance, is the present indicative. As such, there is an obvious link with the μὲν utterance by dint of the repetition of (a form of) the verb ἀναφέρω. For (81), finally, the link is more content-oriented – the six men introduced in the μὲν utterance are divided into three groups of two in the δέ utterance. Again, the μὲν utterance forms the basis on which the δέ utterance builds, providing a more fine-grained picture of how these six men were arrayed.

Examples like (79) and (80), and their similarity to (41)-(44), bring out an important observation. Given the parallels with instances where no μὲν is present, there seems to be no reason to suppose that δέ should function differently when it occurs with μὲν than if it occurs on its own. While a μὲν-δέ pair, then, can function similarly to solitary δέ, the reverse is true as well – solitary δέ can function in a way which Bakker seems to reserve for a μὲν-δέ pair. There are many instances of solitary δέ, for example, which involve some sort of contrast:

(82) δυνάμεις λέγοντες πνευματικὰς καὶ ἄσωμάτους τροπικῶς ἐκ τῶν ὑδάτων σημαίνεσθαι· καὶ ἄνω **μὲν** ἐπὶ τοῦ στερεώματος μεμενηκέναι τὰς κρείττονας, κάτω **δὲ** τοῖς περιγείοις καὶ ὑλικοῖς τόποις προσαπομείναι τὰς πονηράς. Διὰ τοῦτο δὴ, φασὶ, καὶ τὰ ἐπάνω τῶν οὐρανῶν ὕδατα αἰνεῖν τὸν Θεόν· τουτέστι, τὰς ἀγαθὰς δυνάμεις ἀξίας οὔσας, διὰ καθαρότητα τοῦ ἡγεμονικοῦ, τὸν πρόποντα αἶνον ἀποδιδόναι τῷ κτίσαντι· τὰ **δὲ** ὑποκάτω τῶν οὐρανῶν ὕδατα τὰ πνευματικὰ εἶναι τῆς πονηρίας, ἀπὸ τοῦ κατὰ φύσιν ὕψους εἰς τὸ τῆς κακίας βάθος καταπεσόντα. (Bas. *Hex.* III.9.4-13)

[Basil is arguing against Christian philosophers who treat the waters in Genesis as an allegory:] “They have only seen in the waters a figure to denote spiritual and incorporeal powers. In the higher regions [**men**], above the firmament, dwell the better; in the lower regions [**de**], earth and matter are the dwelling place of the malignant. So, say they, God is praised by the waters that are above the heaven too; that is to say, by the good powers – the purity of what guides them, makes them worthy to sing the praises of God. And the waters which are under the heaven [**de**] represent the wicked spirits, who from their natural height have fallen into the abyss of evil.”

(83) Τίς ἀγνοεῖ τὴν Ἡλιουπολιτῶν συστροφὴν; τίς τὴν Γαζαίων ἀπόνοιαν, τῶν ὑπ’ ἐκείνου θαυμαζομένων καὶ τιμωμένων, ὅτι καλῶς αὐτοῦ τῆς μεγαλοπρεπείας ἥσθοντο; τίς τὴν Ἀρεθουσίων μανίαν, τῶν τέως ἀγνοουμένων, ἐξ ἐκείνου **δὲ** τοῦ καιροῦ καὶ λίαν ἐπιγινωσκομένων; (Greg. *Iul.* I.616.3-8)

[Gregory thinks Julian is responsible for the crimes which were perpetrated against Christians by frenzied mobs during his reign:] “Who is ignorant of the tumult of the Heliopolitans? Who, of the mad behaviour of the people of Gaza – those that were praised and rewarded by that man because they had properly appreciated his magnificence? Who has not heard of the insanity of the Arethusians, who were previously unknown, but ever since that [**de**] time only too notorious?”

(84) καὶ δύο Περσῶν ἅμα τοῖς Αἰθίοψι περαιωθῆναι παρασκευάσας δῆθεν ὡς τὴν γνώμην τῶν κατὰ τὴν Ἐλεφαντίνην, ἐφ’ οἷς ἂν ἔλαιντο διαλύσασθαι πρὸς Ὑδάσπην, μαθησομένους ἐξέπεμπε, τὸ **δ’** ἀληθές, εἰ παρασκευάζεσθαι πρὸς μάχην προαιροῦνται ὅταν αὐτός ποτε διαδρᾶναι δυνηθῇ. (Hel. *Aeth.* 9.13.3.1-6)

[Oroondates has escaped from Syene while it was being besieged by Hydaspes, and after he had agreed to surrender. Before escaping, he had managed to convince Hydaspes to send some Persian troops to the Persian garrison stationed at Elephantine to see if they were willing to surrender:] “And Oroondates arranged to send out two Persians who were to cross the water together with the Ethiopians, ostensibly (δῆθεν) to ascertain the inclination of the men in Elephantine regarding the terms on which they might decide to make their peace with Hydaspes; though in fact [**de**] the aim was to see if they would rather prepare themselves to do battle when Oroondates might effect his escape.”

In (82), the waters under the heaven (τὰ ὑποκάτω) are contrasted with the waters above the heaven (τὰ ἐπάνω). However, τὰ ἐπάνω are not marked by μέν to indicate the contrast. Compare this to the bolded μέν-δέ pair which occurs just a couple of lines earlier – there, the ‘above regions’ (ἄνω) and the ‘below regions’ (κάτω) are marked via a μέν-δέ pair. This means that while it is possible to mark ‘higher’ and ‘lower’ regions (and, hence, contrastive contexts) with a μέν-δέ pair, it is not necessary – contrastive contexts also occur with solitary δέ, as evidenced by this example.⁶⁴ (83) contains a contrast between previous times (τέως) and the period starting with the time Gregory is discussing (ἐξ ἐκείνου τοῦ καιροῦ). Compare this instance to (85) (as well as (75)):

(85) τέως μὲν φοβερὸν ὑπηχεῖν, καὶ καπνὸν τοῦ κακοῦ μήνυμα τῆς κορυφῆς ἀπερεύγεσθαι· εἰ δέ που πλεονάσαν τύχοι καὶ δυσκάθεκτον γένοιτο, τῶν οἰκείων κόλπων ἀποβρασθὲν, ἄνω φερόμενον καὶ ὑπὲρ τοὺς κρατῆρας χεόμενον. (Greg. *Iul.* I.613.13-17)

[Gregory is comparing Julian’s impiety ‘boiling over’ from the recesses of his mind to the public eye, to the fires of the Etna:] “For a while [*men*] it utters a fearful echo, and belches out from its summit smoke, a token of the mischief going on within; but if [*de*] it should be superabundant, and grow irrepressible, it bursts forth from its proper bosom, is carried upwards, and pours over the crater.”

Here, the τέως utterance is marked by μέν, but the contrast is similar to the one expressed in (83) – a previous situation is contrasted with the situation in the δέ utterance.⁶⁵

There are also clear parallels with a μέν-δέ pair for (84):⁶⁶

(86) Ἡ δὲ Ἀρσάκη τοὺς ἐν τέλει Περσῶν ἐστίασασα, δῆθεν μὲν ὡς συνήθως ἐκείνους τιμῶσα ἀληθέστερον δὲ τὴν πρὸς Θεαγένην ἔντευξιν εὐωχίαν ἄγουσα. (Hel. *Aeth.* 7.19.5.1-3)

[Arsace has organized a banquet in honor of Theagenes:] “Arsace entertained the Persian dignitaries at a banquet, ostensibly (δῆθεν) [*men*] in customary compliment to them, but more truly [*de*] in celebration of her meeting with Theagenes.”

⁶⁴ For other examples of solitary δέ in contrastive contexts, see e.g. Bas. *Hex.* V.9.33, VI.2.38, VI.3.15, VIII.1.46, VIII.3.39, VIII.6.10 and VIII.8.50; Greg. *Iul.* I.557.7; Hel. *Aeth.* 1.15.4.1, 3.15.3.3, 4.5.7.9 (compare with 4.5.7.7-8, which takes up a similar contrast but has a μέν-δέ pair), 5.20.3.7, 6.8.5.2, 9.24.7.5 and 10.30.5.3.

⁶⁵ It could be argued that the contrast is stronger in (83) – ἀγνοουμένων is semantically opposed to ἐπιγινωσκομένων in a way which the two propositions in (85) are not. However, the transition between the two communicated assumptions is still quite similar in (83) and (85).

⁶⁶ See also Hel. *Aeth.* 7.18.1.4-5 and 8.6.3.2-3.

As in (84), the utterance preceding *δέ* provides the ostensible reason for performing an action, while the *δέ* utterance provides the real reason for doing it – in (84), the real reason is introduced by *τὸ ἀληθές* ('in truth'); in (86), by *ἀληθέστερον* (a comparative, 'more truly'). As in (85), an example marked by solitary *δέ* in one instance can be marked by a *μέν-δέ* pair in another.

Examples like these seem to point to the conclusion that there is no real difference between *δέ*'s meaning when it occurs on its own as opposed to when it occurs as part of a *μέν-δέ* pair. What is true is that the *μέν*'s meaning harmonizes perfectly with *δέ*'s to mark contexts which are likely to be contrastive to a greater or lesser extent. As the previous examples have demonstrated, *μέν* points forward – it indicates that the assumption it marks will remain relevant for the interpretation of the upcoming utterance. This upcoming utterance is usually marked by *δέ*, which, in turn, indicates that the previously communicated assumption (i.e., the one communicated in the *μέν* utterance) will be relevant as a background for its own interpretation. 'Contrast', in this sense, is nothing more than two separate assumptions which are interpreted against each other and contain semantically contrastive information. In other words, contrast falls out naturally from the semantics of the information contained within the utterances marked by *μέν* and *δέ*, but is not marked as such by *μέν* and *δέ*. The function of these DMs is to indicate that the assumption communicated in the first utterance will be relevant for the interpretation of the second utterance. With the assumption communicated in the *μέν* utterance in mind, the *δέ* utterance is interpreted as communicating a contrast. But the important point is that, even without *μέν* and/or *δέ*, the contrast would be there.

In the preceding cases, there is a clear harmonization between the forward-pointing function of *μέν* and the backward-looking function of *δέ*. As such, *μέν* actually points to the continuity inherent in *δέ*: it indicates that the utterance preceding *δέ* will be relevant for the interpretation of the *δέ* utterance. This becomes particularly salient in an example like (81), where the group of people referred to in the *μέν* utterance is subdivided into further groups in the *δέ* segment. Since 'solitary' *δέ* can occur in the same contexts as it does in those examples which include a *μέν* in the preceding utterance, this means that *δέ*, on its own, also points back, and hence contains a continuous component.⁶⁷ The semantics of *μέν*, then, provide a pointer to *δέ*'s function, and offer evidence for the hypothesis that *δέ* is partly continuous. As both Bakker and Black only focus on the discontinuity marked by *δέ*, it is necessary to make this explicit.

⁶⁷ This also puts the final nail in the coffin of *δέ*'s possible compositionality – as with the other DMs discussed in §3.2.2, *δέ*'s meaning does not change when it co-occurs with *μέν*.

In some cases, μέν and δέ communicate two separate assumptions which should be ‘packaged’ as part of a larger, overarching context (see also (29) *supra*):

(87) ἐμοὶ δὲ καὶ πόρρωθεν τρόπον τινὰ ἑωρᾶτο, ἐξ οὗ τῷ ἀνδρὶ συνεγενόμην Ἀθήνησιν. Ἦλθε γὰρ κάκεισε, ἄρτι τῶν κατὰ τὸν ἀδελφὸν αὐτοῦ νεωτερισθέντων, τὸν βασιλέα τοῦτο αὐτὸ παραιτησάμενος. Διττὸς δὲ αὐτοῦ τῆς ἐπιδημίας ὁ λόγος· ὁ μὲν εὐπρεπέστερος, καθ’ ἱστορίαν τῆς Ἑλλάδος καὶ τῶν ἐκεῖσε παιδευτηρίων· ὁ δὲ ἀπορρητότερος, καὶ οὐ πολλοῖς γνώριμος, ὥστε τοῖς ἐκεῖ θύταις καὶ ἀπατεῶσι περὶ τῶν καθ’ ἑαυτὸν συγγενέσθαι, οὕτω παρρησίαν ἐχούσης τῆς ἀσεβείας. (Greg. *Iul.* II.692.6-16)

[Gregory is discussing how Julian’s impiety had already manifested itself before he became emperor:] “I had seen it before as well in some sense, ever since I lived with this person at Athens; for he too had gone there, immediately after the catastrophe of his brother, having himself solicited this permission from the emperor. There was a double reason for this journey: the one [*men*] more specious – the object of acquainting himself with Greece and the schools of that country; the other [*de*] more secret, and communicated to but a few – that he might consult the sacrificers and cheats there upon the matters concerning himself; for he did not yet have freedom of action for his impiety.”

There is a clear contrast here – one of Julian’s reasons for going to Athens was more obvious, the other was more secret. However, they should both be considered as belonging to the overarching context introduced by Διττὸς δὲ αὐτοῦ τῆς ἐπιδημίας ὁ λόγος – the μέν and δέ utterances communicate two separate assumptions which should be interpreted not only against each other, but also in light of the larger assumption which was communicated before μέν. This observation is again perfectly in line with the account of δέ proposed here – on this view, δέ should be interpreted against the more specious reason outlined in the μέν utterance. But the contextual continuity which is part of δέ’s function is active at a superordinate level as well – both assumptions should be tied together under the heading ‘reasons for Julian’s departure to Athens’, as it were. Put differently, there is clear discontinuity between the μέν and δέ utterances (the two reasons are contrasted); at the same time, there is also obvious continuity in that Gregory had already made clear that the reason for Julian’s departure was twofold (διττός) before presenting the contrast via a μέν-δέ pair.

(88) «Μανθάνοις ἄν» ἔφη ὁ πρεσβύτερος· «διηγῆσομαι δέ σοι τὰμαυτοῦ πρότερον ἐπιτεμῶν, οὐ σοφιστεύων ὡς αὐτὸς οἶει τὴν ἀφήγησιν ἄλλ’ εὐτακτόν σοι καὶ προσεχῇ τῶν ἐξῆς παρασκευάζων τὴν ἀκρόασιν. Ἐμοὶ πόλις μὲν Μέμφις, πατὴρ δὲ καὶ ὄνομα Καλάσιρις, βίος δὲ νῦν μὲν ἀλήτης πρότερον δὲ οὐ· πάλαι γὰρ προφήτης. (Hel. *Aeth.* 2.24.5.1-6)

[Cnemon is asking Calasiris to tell him about how he knows about Theagenes and Chariclea.] “‘You shall know all,’ said the old man [i.e., Calasiris, SZ]; ‘but first I will tell you briefly of myself as well, not beguiling you in my tale, as you think, but propounding such talk as shall be true and well agreeing to my recitation of the things to follow. The city [*men*] wherein I was born is called Memphis; my father’s [*de*] name is also Calasiris. As touching my trade of life [*de*], I am now a vagabond, but earlier I was not; for before I was a prophet.’”

In this example (which contains a μέν-δέ-δέ construction⁶⁸), there does not seem to be an overarching context made explicit, as there was in (87). In fact, there does not seem to be any obvious continuity between the assumption communicated in the μέν utterance and the ones communicated in the δέ utterances – the former provides information about Calasiris’ city of origin, the first δέ utterance about his father, and the second δέ utterance about his way of life. However, the preceding utterance indicates how these assumptions are to be processed – as information about Calasiris himself. In answering Cnemon’s question, Calasiris says that he first (πρότερον) wants to tell him about himself (διηγῆσομαι δέ σοι τὰμαυτοῦ). The assumptions communicated by the μέν-δέ-δέ construction are clearly separate, but there is, then, continuity as well in that they should be subsumed under the overarching context of ‘Calasiris’ – that is, a context is opened in which information will be presented which has to do with Calasiris. In that sense, μέν points forward in that the assumption it marks should be kept in the background as part of the hearer’s ongoing construction of an encyclopaedic entry related to Calasiris – μέν indicates that at least one other assumption will follow, and that it will probably be marked by δέ. The encyclopaedic entry ‘Calasiris’ in the hearer’s mind is assembled partly by the assumption in the μέν utterance; it is developed further through the assumption communicated by the first δέ utterance; and it is completed through the addition of the assumption communicated by the second δέ utterance. The outcome of this progress in the hearer’s mind will be as follows:

⁶⁸ Theoretically, a μέν-δέ construction may be expanded indefinitely by adding subsequent δέ utterances. With a μέν-δέ-δέ construction, for instance, the speaker may want to point to a three-fold contrast, three aspects of someone’s personality, or, as is the case in (88), three characteristics of a person. In practice, the upper limit of the construction seems to be a four-fold complex of assumptions (i.e., a μέν-δέ-δέ-δέ construction) – see e.g. Bas. *Hex.* IV.5.44-6 and VIII.3.11-13, Greg. *Iul.* I.568.28-9 and I.629.1-2; Hel. *Aeth.* 7.8.3.2-7.8.3.2.8 and (possibly) 1.1.5.1-1.1.5.4.

(89) a. Encyclopaedic entry: Calasiris.

b. Assumption: from Memphis.

c. Assumption: father is also named Calasiris.

d. Assumption: now a vagabond, used to be a prophet.

This is of course a rough sketch, but I think it demonstrates how μέν and δέ work here. By presenting the information through a μέν-δέ-δέ construction, Heliodorus (via Calasiris) makes clear that these assumptions are related yet distinct from each other. By indicating beforehand that Calasiris will start by talking about himself, they can be integrated into the overarching context ‘Calasiris’ – later on, when Calasiris rushes to stop a fight between his sons over who will become prophet of Memphis, Heliodorus’ audience will be able to relate this scene to the encyclopaedic entry they managed to build up through (88). Note the difference with Bakker’s ‘transitional’ use of μέν-δέ – there is no clear break to a new ‘thematic section’, but a separation between assumptions which fit into a larger whole.

(90) κρηπὶς μὲν αὐτοῖς ἱμάντι φοινικῶ διάπλοκος ὑπὲρ ἀστραγάλων ἐσφίγγετο, χλαμὺς δὲ λευκὴ περόνη χρυσοῦ πρὸς τοῖς στέρνοις ἐσφίγγετο τὴν εἰς ἄκρον πέζαν κυανῇ τῇ βαφῇ κεκυκλωμένη. Ἡ δὲ ἵππος Θεσσαλικὴ μὲν πᾶσα καὶ τῶν ἐκεῖθεν πεδίων τὸ ἐλεύθερον βλέπουσα· τὸν γὰρ χαλινὸν ὅσα μὲν δεσπότην ἡρνεῖτο διαπτύουσα καὶ θαμὰ προσαφρίζουσα, ὥς δὲ τὸν νοῦν ὑψηγόμενον τοῦ ἀναβάτου φέρειν ἡνείχετο· φαλάρους δὲ καὶ προμετωπιδίοις ἀργυροῖς καὶ ἐπιχρύσοις ἐξησκημένη, καθάπερ ἀγώνισμα τοῦτο τῶν ἐφήβων πεποιημένων. (Hel. *Aeth.* 3.3.2.3-3.3.3.7)⁶⁹

[Calasiris is describing the procession in Delphi to Cnemon. He has turned to the group of young men of whom Theagenes formed a part.] “Their boots [*men*] wrought of purple leather were folded finely a little above their ankles. Their cloaks [*de*] were white, fastened with buckles of gold before their breasts, with a border of blue around the nethermost hem. Their horses all came out of Thessaly [*men*], and by their frank countenances showed the pasturage of their country: on their bits, scorning their master while spitting on him, they foamed often besides; yet they bore up with carrying their rider, their mind being guided. Their saddles [*de*] and the rest of their harness was so beset with silver and gold that in this point the young men seemed to be holding a contest.”

⁶⁹ Note also the μέν-δέ pair which I have not underlined – here, there is a contrast (or even a denial of expectation) between the horses’ scorn of their riders and their pliability towards those riders’ commands (see Hel. *Aeth.* 2.12.5.1-9 for a similar example).

This example contains two instances of a μέν-δέ pair which are similar to the construction in (88). The first pair contains two assumptions which again do not seem to have much in common; as in (88), however, the assumption communicated in the μέν utterance combines with the assumption in the δέ utterance to give a sense of the youths' appearance. As such, the μέν assumption has to be kept active in the background of the hearer's mind when he interprets the δέ utterance, as the two assumptions together give a sense of the youths' expensive attire. The two assumptions are clearly separate (one is about the youths' boots, the other about their cloaks), but also, in this sense, part of an overarching context in which they together lead to a mental image of the youths' appearance.

The second μέν-δέ pair is again an instance of two assumptions which are integrated into an overarching context. With Ἡ δὲ ἵππος (notice the presence of a δέ, which again marks a 'topicalizing' transition – cf. §3.2.3.2), Calasiris goes from describing the youths' garb to the horses which carried them. These horses are originally from Thessaly, as indicated in the utterance marked by μέν – their disposition, he adds, reveals their home country. In the δέ utterance, the horses' attributes are discussed – their saddles and harnesses. These assumptions achieve relevance as information about the youths' horses:

- (91) a. Encyclopaedic entry: The horses of the youths at Delphi.
- b. Assumption: from Thessaly, with the countenance to match.
- c. Assumption: saddles and harnesses beset with silver and gold.

With these assumptions, Calasiris (and Heliodorus) are able to provide detail about the scene at Delphi and the impressive appearance of both the youths (in the first μέν-δέ pair) and their horses (in the second μέν-δέ pair). By using the μέν-δέ construction, he is able to impart the information in the respective utterances as separate yet related – μέν indicates that the earlier assumption is relevant as a background for interpreting the second assumption. As a result, the assumptions are taken together as part of an overarching context (the youths and the horses, respectively), and the audience (both Calasiris' and Heliodorus') will be able to construct a mental image of the processions at Delphi.

3.2.3.5 Tying everything together; a cline of (dis)continuity?

It is tempting to see the range of contexts in which δέ occurs in this chapter and correlate these with distinct uses of δέ – for example, by distinguishing between its functions when it is used on its own on the one hand, and when it is used with μέν on the other. There are two reasons not to give in to this temptation. One is the fact that, as outlined above, the same functions which Bakker assigns to the μέν-δέ construction, can be found in instances containing solitary δέ. The other is Grice's Modified Occam's

Razor, which I took to be a guiding principle in analyzing $\delta\acute{e}$'s meaning (and doing semantics in general). I do not see any compelling data to suggest that more functions need to be proposed for $\delta\acute{e}$ than the continuity-within-discontinuity one I have described in this chapter. It's true that $\delta\acute{e}$'s meaning makes it more likely to appear in contexts where a shift in perspective occurs, or contexts which include some sort of reformulation, or contexts where there is an obvious contrast (see Black (2002: 177) on this point as well). But this does not mean that $\delta\acute{e}$ indicates that a perspectival shift occurs, or a reformulation, or a contrast – this would lead to an unwieldy proliferation of functions, under which $\delta\acute{e}$ would be able to indicate a battery of coherence relations, including seemingly unrelated ones such as Contrast, Reformulation and Evidence. A proposal which is in line with contemporary thinking about “cognitive economy concerning storage of lexical information” would start from the assumption that a single function for $\delta\acute{e}$ suffices if it explains the wide range of contexts across which it is able to appear. In other words, this account would be unitary if at all possible (Matsui 2002: 869; see also Foolen 1993: 64-69; Hansen 2005: 64; Pons Bordería 2008: 1419). It would also leave the majority of the burden of interpretation where it belongs, i.e., at the level of pragmatics – as pointed out in the previous chapter, the human pragmatics submodule (which is responsible for deriving fully propositional interpretations of utterance) is a much more powerful and flexible tool than our semantic decoding capabilities are.⁷⁰ $\Delta\acute{e}$'s function cannot (and, as I have tried to argue, should not) be described in terms of its contribution to coherence, but should be captured in terms of a procedural rule which amounts to the following:

(92) Interpret the upcoming utterance as an utterance which communicates (a) separate assumption(s), and which achieves relevance in light of the contextual assumptions which were provided in the preceding utterance(s) and which are still highly accessible.

Some clarifications are in order here. I use ‘accessible’ in Sperber & Wilson’s (1995²) sense of requiring little processing effort – the assumptions which are necessary for interpreting a $\delta\acute{e}$ utterance do not require much in the way of processing effort because they have just been communicated, and are hence still active in the hearer’s consciousness.⁷¹ I use ‘contextual assumption’ as I have done for the entirety of this

⁷⁰ See the previous chapter, in which I outlined, following Scott-Phillips (2015), that ostensive-inferential communication is possible without any semantics at all – but not without pragmatic (i.e., inferential) abilities (cf. also Blakemore 2002: 71). See also Blakemore & Carston (1999) on *and*.

⁷¹ On this point, see Oswald et al. (2016) as well. See also Ariel (1990), Chafe (1994: 72-73) and Gundel et al. (2012) on different uses of the term ‘accessibility’. This does not mean that these are the *only* assumptions the

dissertation – as an individual’s representation about a part of the world which can be brought to bear on the interpretation of an utterance and, in that sense, “affect[s] the interpretation of an utterance” (Sperber & Wilson 1995²: 15; also Blass 1990: 31). The term ‘separate’, finally, is meant to convey the idea that $\delta\acute{\epsilon}$ utterances achieve relevance on their own – that is, they communicate assumptions of their own. The ways in which they achieve relevance are varied, but they are always to be taken as separate entities, with their own positive cognitive effects.

To refer to the rule in (92), I have adopted the shorthand ‘continuity-within-discontinuity’, adopted (and adapted) from Schourup (2011). ‘Continuity’ refers to the fact that contextual assumptions added to the cognitive environment with the previous utterance(s), are required for deriving the speaker-intended interpretation of the $\delta\acute{\epsilon}$ utterance. ‘Discontinuity’ refers to the fact that $\delta\acute{\epsilon}$ utterances yield positive cognitive effects of and on their own, i.e., that they lead to separate explicatures and implicatures. I do want to emphasize that ‘continuity-within-discontinuity’ is just a shorthand, and that the procedural rule in (92) is much closer to what I perceive to be $\delta\acute{\epsilon}$ ’s actual function.

While the procedural rule in (92) retains Bakker’s and Black’s notion of discontinuity (as well as Klein’s (1992) and Sicking’s (1993) intuitions about the inherent continuity of $\delta\acute{\epsilon}$ utterances), the underlying approach to this notion is radically different. Whereas Bakker construes the discontinuity encoded by $\delta\acute{\epsilon}$ in terms of its ‘boundary-marking’ function by which it marks off separate discourse segments, the analysis presented here describes $\delta\acute{\epsilon}$ ’s meaning primarily in terms of the selection of contextual assumptions. As discussed in the previous chapter, relevance theory assumes that an intextricable part of the interpretation process is establishing the speaker-intended context:

“Each new utterance, while drawing on the same grammar and the same inferential abilities as previous utterances, requires a rather different context. A central problem for pragmatic theory is to describe how, for any given utterance, the hearer finds a context which enables him to understand it adequately.” (Sperber & Wilson 1995²: 16)

Under the approach espoused in this chapter, $\delta\acute{\epsilon}$ ’s function would lie in indicating that, while the upcoming utterance is a separate entity, it relies on the preceding utterance(s) for the contextual assumptions which will be at the heart of the

hearer will use in deriving the speaker-intended interpretation of the $\delta\acute{\epsilon}$ utterance. Utterance interpretation is a process which involves a glut of contextual assumptions, many of which are left implicit but are accessible to the hearer – or so the speaker assumes (cf. Blakemore 1992: 128). However, it does mean that the assumptions communicated in the preceding utterances will be fundamental in deriving the correct interpretation.

interpretation process for the upcoming utterance. It is a way for the speaker to help the hearer (a) select the right context; and (b) interpret the upcoming utterance as achieving relevance on its own. As such, $\delta\acute{\epsilon}$ indicates a ‘break’ in the flow of discourse (cf. Chafe 1994) without severing the contextual ties with the preceding utterance. In metaphorical terms, it is like moving from one floor of the building to another, not moving out from the building altogether.

The analysis proposed here is fully unitary (see Rijksbaron (1997b: 13) for a similar point of departure). Ekkehard König (1991: 175; cited in Foolen 1993: 69) warns against such an approach by arguing that a unitary meaning for what I have called DMs is at risk of ascribing “so abstract and unspecific” a meaning to a given DM that it is “devoid of any practical value” (see also §2.4). This danger may be very real for the procedure in (92) – isn’t this rule too general and abstract? Does it set off $\delta\acute{\epsilon}$ from other DMs adequately? Where should we place $\delta\acute{\epsilon}$ *vis-à-vis* other DMs which have been treated as encoding some sort of continuity and/or discontinuity, i.e., $\kappa\alpha\acute{\iota}$ and $\alpha\lambda\lambda\acute{\alpha}$? In the rest of this section, I will get into these questions.

As to the matter of whether the rule in (92) is not too vague and general, this is a valid criticism. But it is important to see the procedure for $\delta\acute{\epsilon}$ in the larger ecology of Ancient Greek coordination. First, asyndeton is traditionally taken to be much less common in formal, written Ancient Greek than it is in, for example, formal, written English (Smyth 1920: 484; George 2009: 168) – asyndeton is more of a rhetorical figure than it is the standard way of connecting clauses in written Ancient Greek (Blettner 1983: 51; Smyth 1920: 484). In conceptually oral Ancient Greek, asyndeton is more frequent, as already noted by Aristotle (De Jonge 2008: 209), but it is still felt to be a special way of putting things – Aristotle argues that, by using asyndeton, “one should not speak with the same tone and character, as if saying only one thing” (Blettner 1983: 51). Instead, “many things seem to be said at the same time” (De Jonge 2008: 209). Although asyndeton has not been “studied in detail in Ancient Greek” (Wakker 2009: 67)⁷², many scholars agree that it is often stylistic in nature, and not the standard method of coordinating utterances (Denniston 1954²: xliii-xlv; Wakker 2009: 67; George 2009: 167).⁷³ Moreover, there is no clear definition of what constitutes ‘true’ asyndeton in Ancient Greek. As Rijksbaron (1997b: 2, 13) points out, Denniston (1954²) distinguishes between ‘unmitigated’ and ‘mitigated’ asyndeton – the latter occurs when there is no

⁷² Black (2002: 179-217) has a chapter on asyndeton in the Gospel of Matthew, but her summary that it can continue “a mental model of conversation” or open “a new segment in [the audience’s] mental representation of the discourse” (2002: 217) seems to be less a conclusion than a call for further research.

⁷³ A dissenting voice here is Poythress’ – he argues that asyndeton “is the ‘unmarked’ conjunction in expository discourse in the Gospel of John” (1984: 324). In narrative discourse, however, asyndeton is much less frequent and, according to Poythress, governed by specific rules (1984: 331-333).

“traditional coordinator” (δέ, καί or ἀλλά) or subordinating conjunction present, but a DM is (Wakker 2009: 79). Wakker argues that the addition of οὖν, in particular, would not lead to asyndeton between the two utterances it connects (ibid.). George (2009: 166) even goes so far as to state that it is not at all obvious that spoken Ancient Greek contains more asyndeton than written Ancient Greek, and that it may be characterized by other DMs – he gives the example of γε μήν in Xenophon’s Symposium, arguing that its omission would lead to asyndeton. If οὖν and, by extension, γάρ are included in the set of linguistic items which prevent (unmitigated) asyndeton (as I think they should be), asyndeton becomes quite rare. Data from the archetypally conceptually oral Ancient Greek texts, the Iliad and Odyssey, does not really fit the ‘oral = asyndeton’ hypothesis either – in Homer, δέ occurs once every 18 words (see the Introduction as well). If Homer is an example of conceptually oral language, as most scholars agree (see §3.1.2.1), δέ’s high frequency does not really make any sense – we would expect less DMs (especially δέ, καί and ἀλλά) and more asyndeton. So either we draw the distinctly unlikely conclusion that Homer is not conceptually oral, or we choose the more palatable path of adjusting the assumption that conceptually oral Ancient Greek contains more asyndeton by default.

Asyndeton is not especially prevalent in my corpus of texts. In Basil, δέ occurs once every 65 words; in Gregory, once every 60 words; in Heliodorus, once every 41 words. Καί occurs once every 19 words in Basil; once every 12 words in Gregory; and once every 14 words in Heliodorus – even taking into account the fact that many of these cases will be instances of coordination at a lower syntactic level than the clause (and the focalizing use exemplified in e.g. (27) and (38) *supra*, where it often co-occurs with δέ), there are still many δέ’s and clause- or utterance-connecting καί’s to be found in these texts. Ἀλλά occurs once every 134 words in Basil; once every 164 words in Gregory; and once every 159 words in Heliodorus. Looking at γάρ and οὖν⁷⁴, the first occurs once every 113 words in Basil, once every 139 words in Gregory, and once every 143 words in Heliodorus; the latter once every 392 words in Basil, once every 450 words in Gregory, and once every 352 words in Heliodorus. Taking all of these numbers into account, and keeping those instances in mind where a subordinating conjunction such as ὥστε or ἵνα occurs⁷⁵, a picture emerges in which there is simply not that much real estate left for

⁷⁴ These can also co-occur once in a blue moon (once in Basil and once in Heliodorus). See §5.2.6 for more details. There are also several instances of δέ co-occurring with οὖν (4x in the *Contra Iulianum* and 37x in the *Aethiopica*; see e.g. (31) above) – for discussion, see §5.2.4.

⁷⁵ Some subordinating conjunctions often co-occur with δέ. Conditional εἰ (‘if’), for example, co-occurs with δέ 19 times in the *Contra Iulianum*, 17 times in the *Hexaameron* and 49 times in the *Aethiopica*. Ἐπεὶ (see e.g. (43) *supra*) almost always co-occurs with δέ – 16 out of 24 total instances in the *Contra Iulianum* and no less than 58 out of 61 total instances in the *Aethiopica*.

asyndeton. Asyndeton in Ancient Greek in general, and even in my corpus in particular, would deserve an entire dissertation on its own, and I cannot do justice here to the effects its use entails. But as the discussion here has shown, asyndeton is much less common in Ancient Greek than it is in contemporary English, in conceptually oral and written discourse alike.

It is against this background that δέ's function should be interpreted. In the earliest literary Greek we have, Homer, δέ occurs extremely often, as stated above. As Bakker notes (1993: 279; see §3.1.2.1), δέ in Homer functions as “the most neutral linkage marker” between two utterances (or, in his framework, intonation units), indicating that “a new step in the progression of the narrative” has been reached (1993: 280) – see example (5) above. In essence, δέ functions as punctuation does in our written discourse – not necessarily just as a full stop, but also as a semi-colon, parentheses or even a paragraph break.⁷⁶ Δέ, at its core, separates different communicated assumptions from each other while, at the same time, indicating that the preceding assumptions remain relevant for interpreting the upcoming assumption. Written English usually separates different assumptions through punctuation marks, but in oral English, *and* and *but* can function in much the same way as δέ does:

(93) [How do you know him?]

I know him because years ago, my husband's family were all in the laundry business. And that's the business that his father was in, and that's how he worked his way up t'become- t'go through law school. But uh I don't think too highly of him because a couple years ago, when the ki- the teachers were out on strike, and the schools were closed, and we went over there, and we asked him y'know to see if he could do something about it, gettin' 'em t'go back at least. He came t'the door, all dressed in an ascot, and a bathrobe and he said, “I didn't ask you people t'vote for me”, and I thought, “Sure, now that you're in office...” he didn't ask us t'vote for him. (from Schifffrin 1986: 53)

It is, of course, dangerous to draw cross-linguistic parallels – especially between dead and living languages. However, there are some clear similarities – the first underlined ‘and’ is about the laundry business introduced in the preceding utterance. As such, it may be connected to the ‘topicalizing’ function of δέ discussed in (51)-(53). The underlined ‘but’ marks a transition to the speaker's views on the man introduced in the preceding utterances, and hence marks a perspectival shift – as δέ does in e.g. (61)-(63).

⁷⁶ See Chafe (1988b) on the relation between segmentation and punctuation. It is interesting, in this regard, to note that punctuation marks, under a RT framework, are procedural items (Bar-Aba 2003: 1033) – just as δέ is.

The second underlined ‘and’ is similar to the $\delta\acute{\epsilon}$ ’s in Homer in (5), marking the next step in the narrative; the final underlined ‘and’ marks a reaction to someone else’s words, as $\delta\acute{\epsilon}$ does in (61)-(63) as well.

The proposed function for $\delta\acute{\epsilon}$ may still seem too obvious – after all, isn’t most discourse connected in the sense that contextual assumptions made available in a previous utterance function as a background for the interpretation of the following utterance? A possible solution to this question lies in the ecology of Ancient Greek coordination. Given that asyndeton is much less frequent in Ancient Greek than in English, it may be the case that $\delta\acute{\epsilon}$ developed as a means of separating different assumptions and, hence, as ‘semantic punctuation’ – in line with Bakker’s analysis of $\delta\acute{\epsilon}$ in Homer (see (5)). The contextual continuity indicated by $\delta\acute{\epsilon}$ made it into an especially useful tool for the contexts in which it occurs in Basil, Gregory and Heliodorus. In reformulations, for instance, the preceding assumption is given a new form; with evidence, the preceding assumption is still active as the background for which evidence is provided. In perspectival shifts, the preceding context remains stable; what changes is the point of view from which that context is considered. With $\mu\acute{\epsilon}\nu$, which essentially indicates ‘another assumption will follow for which this one will be relevant’, $\delta\acute{\epsilon}$ harmonizes perfectly in that the preceding assumption is taken as the background against which the assumption in $\delta\acute{\epsilon}$ is interpreted – which leads to a great many contexts in which the two assumptions are used in a contrastive sense.

The meaning I have ascribed to $\delta\acute{\epsilon}$ becomes more pronounced when we compare it to $\kappa\alpha\acute{\iota}$ and $\alpha\lambda\lambda\acute{\alpha}$. The idea here is that Ancient Greek has a specific system (or cline) of discontinuity, with $\kappa\alpha\acute{\iota}$ on one end of the spectrum and $\alpha\lambda\lambda\acute{\alpha}$ on the other, and $\delta\acute{\epsilon}$ in between those two. This is not a new idea – Black’s (2002) notion of ‘low- to mid-level discontinuity’ implies that there should be highly discontinuous items as well, and Porter & O’Donnell (2007: 10) have proposed a similar cline which includes $\kappa\alpha\acute{\iota}$ at one end of the spectrum and $\alpha\lambda\lambda\acute{\alpha}$ more towards the other end, with $\delta\acute{\epsilon}$ in between. However, Porter & O’Donnell’s cline also includes elements such as $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\tilde{\nu}$ (which, according to them, are located between $\delta\acute{\epsilon}$ and $\alpha\lambda\lambda\acute{\alpha}$), for which I do not see a fruitful analysis in terms of their being more or less discontinuous than, for instance, $\delta\acute{\epsilon}$. Porter & O’Donnell also do not provide further information on how they see the relation between the different elements on their cline, but the idea that $\kappa\alpha\acute{\iota}$, $\delta\acute{\epsilon}$ and $\alpha\lambda\lambda\acute{\alpha}$ mark different degrees of (dis)continuity, holds water in light of the data I have assembled from my corpus.

Turning to *ἀλλά* first, I have already pointed out that it can be used in an ‘eliminative’ sense and a ‘sharply discontinuous’ sense (see examples (14) and (15) above):⁷⁷

(94) Ὁ δὲ Θύαμις ἐπὶ τὸν Πετόσιριν ὥρμησεν, οὐ μὴν ὑπέστη γε ἐκεῖνος τὴν ἔφοδον ἀλλὰ παρὰ τὴν πρώτην κίνησιν εἰς φυγὴν τραπεῖς ἐπὶ τὰς πύλας ἵετο εἰσφρῆσαι εἰς τὸ ἄστυ προθυμούμενος. Ἀλλ’ ἦνυέ τε οὐδέν, ὑπὸ τῶν ἐφεστῶτων ταῖς πύλαις ἀποκρουόμενος. (Hel. Aeth. 7.6.2.1-5)

[The brothers Thyamis and Petosiris are doing battle outside the gates of Memphis over who should be the prophet of the city:] “Thyamis advanced upon Petosiris, who did not stand to face his onset, [*alla*] at his first movement took to flight and made for the gates, his one desire being to gain an entrance into the city. [*Alla*] he was foiled in his purpose, for he was repulsed by the guards at the gates.”

The two types of *ἀλλά* are exemplified here. The first one eliminates a preceding assumption, which had already been denied by οὐ – Petosiris did not stand to face Thyamis’ attack. The second *ἀλλά* is not used with a preceding negation, but is discontinuous in a very similar sense – Petosiris’ assumption that he would be able to enter Memphis is foiled by the city’s guards. As such, the preceding assumption (‘I am going to enter the city’) has to be deleted from Petosiris’ set of contextual assumptions, and is also deleted from Heliodorus’ audience’s cognitive environment due to the addition of the assumption marked by *ἀλλά* – the audience might have expected Petosiris to enter the city and flee Thyamis’ wrath, but this assumption is denied by the assumption in the *ἀλλά* utterance (‘he was foiled in his purpose’). The following examples will bring this point out even more clearly:

(95) Οὐκ ἔτι εἴπωσι τῷ μωρῷ ἄρχειν, τῷ ἀκινήτῳ καὶ ἀναισθήτῳ τῶν εἰδώλων συντάγματι· οὐδὲ ζητήσουσι μυῖαν θεὸν Ἀκκαρῶν, ἢ εἴ τι ταύτης ἐστὶ γελοιότερον· οὐκ ἔτι τὰ ἄλλα περινοήσουσι καὶ τὰ ὑψηλὰ, καὶ πᾶν ὅρος εὕκομον καὶ κατάσκιον· οὐκ ἔτι θύσουσι τοὺς υἱοὺς αὐτῶν καὶ τὰς θυγατέρας τοῖς δαιμονίοις, ὅπερ πάλαι ὁ Ἰσραὴλ ὑπὸ τῶν προφητῶν ὠνειδίζετο. Ἀλλὰ τί τούτων ἐμοί; Πρὸς τὰ παρόντα καὶ ἡμέτερα τρέψομαι. (Greg. Iul. II.701.5-13)

[Gregory is arguing that pagans will, in the future, see the error of their ways:] “They will not longer ‘bid the fool to reign over them’, that is, the motionless, senseless host of idols: neither will they seek after the goddess of flies, Accaron, or any other more

⁷⁷ I will represent *ἀλλά* with [*alla*] in the translations, but note that, in each instance here, it can be translated as ‘but’ (which is not the case for the examples containing *δέ*).

ridiculous than she: they will no more think about the groves, and the high places, and every well-wooded and shady mountain: they will no more sacrifice their sons and their daughters unto devils, for which Israel was reproached long ago by the prophets. [*Alla*] what is all this to me? I will turn to the present, and what concerns ourselves.”

(96) ὀφθαλμοὶ δὲ ἀφεγγεῖς οἱ πάντας τῷ κάλλει καταστράψαντες, οὓς οὐκ εἶδεν ὁ φονεύσας, οἶδα ἀκριβῶς, Ἄλλ’ ὦ τί ἄν σέ τις ὀνομάσειε; νύμφην; ἄλλ’ ἀνύμφευτος· γαμετήν; ἄλλ’ ἀπείρατος. (Hel. Aeth. 2.4.3.4-7)

[Theagenes has come across the body of a dead woman; he thinks it’s Chariclea.] “Light has left the eyes which dazzled all men with their beauty, and which her assassin did not see, I am most certain. [*Alla*] what am I to call you? Bride? [*Alla*] you can have no wedding. Wife? [*Alla*] you have known no marriage bed.”

In (95), ἀλλά marks a sharp break in the discourse – the previous topic of discussion is now considered to be unimportant, and precedes an explicit, metadiscursive transition back to Gregory’s earlier topic of discussion (πρὸς τὰ παρόντα καὶ ἡμέτερα τρέψομαι). As such, the contextual assumptions made available in the previous utterances are no longer felt to be relevant, and ἀλλά signals a sharply discontinuous turn towards another subject entirely. Compare this to δέ, which, in the examples discussed above, never signaled a complete contextual break between its utterance and the preceding assumptions, as ἀλλά does here.

(96) contains similar shifts. The first ἀλλά marks a transition to a different illocution (from a statement to a question) and another topic of discussion entirely – Theagenes is no longer lamenting how his precious Chariclea has been unceremoniously killed, but now asks himself what he should call her. The second and third ἀλλά are sharply discontinuous as well. Theagenes suggests possible appellations for Chariclea, but rejects them completely in the utterances marked by ἀλλά – as such, the preceding assumption (‘maybe I should call Chariclea ‘bride’’) is deleted from Theagenes’ (and Heliodorus’ audience’s) store of contextual assumptions by the assumption in the ἀλλά utterance (‘Chariclea can have no wedding’). Again, these examples are more sharply discontinuous than those containing δέ – an assumption is deleted from the audience’s set of contextual assumptions entirely. In (95), and with the first ἀλλά in (96), there is no ‘deletion’ of this sort (cf. also the first ἀλλά in (94)), but there is a sharp discontinuity all the same – the previous context is no longer felt to be relevant for interpreting the ἀλλά utterance.⁷⁸

⁷⁸ Of course, ἀλλά is a complex DM which deserves more attention than I can give it here. However, I think its basic function has been exemplified adequately here – there are several similar instances for which I do not

However, there are also instances where δέ and ἀλλά seem to be interchangeable:⁷⁹

(97) Οἱ δὲ ἐπὶ ταῖς συνθήκαις ταύταις συνέβησαν, ταῖς οὕτως αἰσχροῖς τε καὶ ἀναξίαις τῆς Ῥωμαίων χειρὸς, ἵν' εἴπω τὸ συντομώτατον· ὧν εἴ τις, ἐκεῖνον ἀφείς τῆς αἰτίας, τοῦτον καταμέμφοιτο, λίαν ἐστὶν ἀγνώμων ἔμοιγε λογιστὴς τῶν τότε συμβεβηκότων. Οὐ γὰρ τοῦ ἀμήσαντος ὁ στάχυς, ἀλλὰ τοῦ σπείραντος· οὐδὲ τοῦ κατασβέσαι μὴ δυνηθέντος ὁ ἐμπρησμός, τοῦ δὲ ἀνάψαντος. (Greg. *Iul.* II.684.5-13)

[The Romans, in the clutches of the Persian forces, have to make a deal with their enemies to leave their borders.] “So they agreed to these terms, so disgraceful, and so unworthy of the hand of Romans, to sum up the whole in one word; of which if anyone, acquitting the late, charges the present emperor, he is, in my opinion, but an ignorant critic of what has happened. For the crop is not due to the reaper, [*alla*] to its sower; nor is the conflagration due to him that is unable to extinguish it, [*de*] to the incendiary.”

Here, δέ is used in the same ‘eliminative’ way as the preceding ἀλλά is. This could be taken to mean that δέ can be used more discontinuously than in the examples I provided *supra* – and this, in turn, would throw a spanner in the discontinuity cline’s works. However, the δέ utterance could be interpreted differently from the one containing ἀλλά – whereas the latter focuses on the elimination of a preceding assumption, the former could be taken to focus on the contrast between the incendiary and the person who is not able to extinguish the incendiary’s fire. As such, these two utterances would lead to positive cognitive effects in different ways – the ἀλλά utterance via the elimination of a previous assumption, the δέ utterance as a separate assumption which should be interpreted against the background of the preceding assumption, and which leads to a contrastive interpretation. In this sense, the rigidity of δέ would shine through – even though the context in which it would occur is quasi-identical to the one in which ἀλλά appears, its presence would lead Gregory’s audience down a different inferential path, and to a different kind of positive cognitive effects. Equally importantly, however, examples like (96) would seem to indicate that there are ‘border zones’ between ἀλλά and δέ – that is, there are contexts in which both DMs would seem to be acceptable.

At the other end of the proposed (dis)continuity cline, καί is usually taken to be equivalent to English *and*⁸⁰, which is not a simple DM either. However, at its most basic

have the space (see e.g. Bas. *Hex.* II.4.27, V.5.11-12 and VII.5.42-43; Greg. *Iul.* I.599.29, II.675.43 and II.701.12; Hel. *Aeth.* 1.14.1.6, 2.25.2.4 and 10.33.1.7). For earlier overviews of its meaning and use, see Drummen (2015: 337-371).

⁷⁹ For other examples, see e.g. Bas. *Hex.* I.1.6 and VII.4.34; Greg. *Iul.* I.584.28 and I.633.26; Hel. *Aeth.* 5.25.3.4, 7.15.5.5 and 8.14.4.7.

level, *καί* seems to point to full-blown continuity or, as I would term it, integration – *καί* indicates that two assumptions should be taken together under a single explicature. Denniston (1954²: 289) argues that its most common use is copulative, “joining single words, phrases, clauses, or sentences”, and this does indeed seem to be *καί*’s core value. There are literally hundreds of clear-cut examples to choose from here:⁸¹

(98) «θάρσει» ἔφη «καὶ θυμὸν ἔχε ἀγαθὸν ὥς ἐκείνων ἀληθῶς ἠξόντων. Νῦν δὲ ἴσως τι κώλυμα γέγονε καὶ βράδιον ἢ κατὰ τὰ συγκείμενα ἀφικνοῦνται, καὶ ἄλλως οὐδ’ ἂν παρόντας ἔδειξα μὴ τὸ πᾶν τοῦ μισθοῦ κομισάμενος ὥστε, εἰ σπεύδεις τὴν θεάν, πλήρου τὴν ἐπαγγελίαν καὶ εἰς τέλος ἄγε τὴν διήγησιν.» (Hel. Aeth. 3.4.10.1-7)

[Cnemon is assuring Calasiris that Theagenes and Chariclea will come:] “Bear up,’ he said, ‘[*kai*] be of good heart, for in truth they will come. Now [*de*] maybe some hindrance has arisen [*kai*] they may arrive later than the appointed time; [*kai*] in any case, even if they were here, I would not have pointed them out before I had obtained my full reward [i.e., Calasiris telling the story of what happened to him, SZ]. So, if you are eager for the sight of them, make good your promise [*kai*] finish your story.”

The first *καί* consists of a reformulation of *θάρσει*. As opposed to the examples with *μᾶλλον δέ* supra, there is no correction here – Cnemon still wants Calasiris to ‘bear up’, and *καί* indicates that the following imperative will form an integrated whole with *θάρσει*. This is followed by a *δέ* – here, there is discontinuity in the sense that the preceding utterance dealt with the future (see the future participle *ἠξόντων*). *Νῦν* (‘now’) indicates that we will get a shift to the present, and we indeed get a discussion of what has possibly happened to delay Theagenes and Chariclea. Note that there is also an illocutionary shift here – whereas *καί*, in the preceding utterance, connected two imperatives, *δέ* marks an utterance which is, for all intents and purposes, a statement. Within the scope of the *δέ* utterance, two *καί*’s occur. The first one seems to appear in a context which is not only integrative, but also consequential – as a result of some hindrance (τι κώλυμα), Theagenes and Chariclea may arrive later (βράδιον) than agreed. The other *καί* (in καὶ ἄλλως) is less straightforward. There seems to be discontinuity here in the sense that it presents a counterfactual – Cnemon transitions to a hypothetical situation in which Theagenes and Chariclea *are* present. I’ll return to this example of *καί* shortly.

⁸⁰ Not taking those cases into account where *καί* is used as a focalizing device – the copulative use discussed here probably derived from this use as ‘also’ (Denniston 1954²: 289), but they are separate functions in my corpus of texts.

⁸¹ As with *ἀλλά* in (94)-(97), I will represent *καί* in the translation with [*kai*], although it can be translated as ‘and’ in all of the examples which follow.

The final example of *καί* seems to induce a consequential and/or reformulative reading. By making good on his promise (πλήρου τὴν ἐπαγγελίαν), Calasiris will complete his narration – that is what he promised to do. At the same time, his promise constitutes the completion of his narration – as such, *καί* also introduces a reformulation. As with the first *καί* in (98), the reformulation is not corrective, but more of a ‘filling in’ of a preceding element (τὴν ἐπαγγελίαν).

(99) νῦν μὲν ληγούσης ἀραιὰ γιγνόμενα καὶ κενὰ, νῦν δὲ αὐξομένης καὶ πρὸς τὸ πλήρες ἐπειγομένης καὶ αὐτὰ πάλιν ἀναπληρούμενα· διότι ὑγρότητά τινα θερμότητι κεκραμένην ἐπὶ τὸ βάθος φθάνουσιν λεληθότως ἐνίησι. Δηλοῦσι δὲ οἱ καθεύδοντες ὑπὸ σελήνην, ὑγρότητος περισσῆς τὰς τῆς κεφαλῆς εὐρυχωρίας πληρούμενοι· καὶ τὰ νεοσφαγῇ τῶν κρεῶν ταχὺ τρεπόμενα τῇ προσβολῇ τῆς σελήνης· καὶ ζώων ἐγκέφαλοι· καὶ τῶν θαλαττίων τὰ ὑγρότατα· καὶ αἱ τῶν δένδρων ἐντεριῶναι. (Bas. *Hex.* VI.10.47-55)

[Basil is explaining how the different stages of the moon influence flora and fauna alike:] “Now while she wanes [bodies] lose their density [*kai*] become void; now while she waxes [*kai*] is approaching her fullness these same bodies *also* appear to fill themselves again, thanks to an imperceptible moisture that she emits mixed with heat, which penetrates into the depths. This is proven [*de*] by how those who sleep under the moon feel abundant moisture filling their heads; [*kai*] see how fresh meat is quickly turned under the action of the moon; [*kai*] see the brain of animals, [*kai*] the moistest part of marine animals, [*kai*] the pith of trees.”

The first *καί* here again introduces a consequence. The utterance communicates the assumption that something happened not only in conjunction with the first part of the utterance, but also as a result of the first part of the utterance – bodies lose their density and [as a result] become void. The second *καί* again introduces something between a reformulation and a consequence – if the moon waxes, she will also approach her fullness (as a consequence of her waxing). Note also the *καί* in italics – it is not used as a connective, but as an inclusively focalizing ‘also’. Moving on, we come across a *δέ* which introduces evidence for the preceding assumption. Under the scope of this *δέ*, there are several different pieces of evidence – the different *καί*’s here connect different ways in which a waxing moon emits moisture. As such, these pieces of evidence should be integrated under the scope of the proof – but note that the transition to these pieces of evidence is marked by *δέ*, not *καί*.

These examples give only a limited sense of the range of contexts in which *καί* can be used. However, it does give a sense of its basic function as an integrative device. Note especially its use as ‘and [as a result]’, exemplified in both (98) and (99), which indicates a tight connection between the two elements connected by *καί*. *Καί* makes clear that there are positive cognitive effects to be gained by integrating the two utterances – effects which would not follow if the assumptions were interpreted separately. In ‘*καί*

[as a result]’, the first assumption leads to the second one through a straightforward cause-consequence relation – *καί* leads the hearer to integrate the two assumptions, and hence facilitates the interpretation that one led to the other (see also Blakemore & Carston (2005: 576) on *and*). The cause-consequence inference is pragmatic, and not part of *καί*’s semantics – but the fact that *καί* is often used in contexts where such a cause-consequence inference falls out naturally, points to its integrative function.⁸²

Examples such as *καὶ ἄλλως* in (98), however, indicate that there is no clear-cut distinction between *καί* as pertaining only to those contexts where there is full-blown continuity (or integration), and *δέ* to those where there is at least some discontinuity – the counterfactual introduced by *καὶ ἄλλως* is discontinuous in at least the minimal sense that it shifts from the present situation, in which Theagenes and Chariclea are not present, to a counterfactual situation in which they are present. As with *ἀλλά*, there seem to be border zones where either *καί* or *δέ* can appear:

(100) *Νυνὶ δὲ γένους ὄντες τῶν ἐπὶ δόξης ἄλλως δὲ τύχης ἐπηρείαις ποικίλαις κεχρημένοι καὶ τὸ παρὸν ἀλητεύοντες, [...].* (Hel. Aeth. 8.3.7.3-5)

[Thyamis is asking Arsace for leave to take Theagenes and Chariclea with him and return them to their fatherland:] “And now, being persons of distinguished family and otherwise [*de*] having met with such a series of various molestations from Fortune that they are now reduced to begging, [...].”

Here, *ἄλλως* does not co-occur with *καί* but with *δέ*. Note also the *καί*, which, in Lamb’s translation, is not translated with ‘and’ but with a consecutive that-clause (‘that they are now reduced to mendiancy’) – it is again an example of *καί* being used in a context which induces this type of ‘resultative’ inference.

The cline of discontinuity proposed here could be conceptualized as follows (going from most continuous on the left to most discontinuous on the right):

(101) *καί* <-----> *δέ* <-----> *ἀλλά*

⁸² See Carston (2002a: 226-258) on *and* for further discussion.

Compare ‘*καί* [as a result]’ to a *δέ* example like (45), where *δέ* signals a transition to an assumption which strengthens an assumption which was communicated in the preceding utterance. The link between the two utterances is different there – while *δέ* marks an assumption which strengthens an existing assumption (‘Ctesiphon will be difficult to take’ becomes ‘Ctesiphon will be very difficult to take’), *καί* allows (and helps lead to) the interpretation that a causal link between the two assumptions exists. Put differently, *δέ* points to continuity (with the previous assumption) within discontinuity (its utterance communicates a separate assumption), whereas *καί* points to full-blown continuity (the truth of the second assumption depends on the truth of the first assumption).

This (dis)continuity should be understood in terms of the contextual assumptions underlying the interpretation of an utterance. Καί indicates that the previous assumption should be integrated with the assumption to follow, while δέ indicates that the preceding context should be taken as a background for the upcoming, separate assumption – as such, δέ is more discontinuous than καί, but its utterance still depends on the existing set of contextual assumption for its interpretation. Ἀλλά, finally, is highly discontinuous – it indicates that the upcoming context deviates from the existing set of contextual assumptions, either because it eliminates the previous assumption from the cognitive environment or because it marks a transition to another topic of discussion entirely. As outlined above, there are border zones between the different DMs in (101) – that is, contexts which are continuous enough to warrant the use of καί but also discontinuous enough to insert a δέ; or contexts which are continuous enough to warrant the use of δέ but discontinuous enough to insert an ἄλλά.

3.3 Conclusions

Δέ's function is two-fold: it indicates that the upcoming communicates a separate assumption, while still taking the previously communicated assumptions as a background for its interpretation. In that sense, δέ's meaning encompasses a continuous and a discontinuous component – the former in terms of context selection (the context which is active, has to be maintained), the latter in terms of the communicated assumption (which is separate from the previously communicated one). The continuity component is what separates δέ from ἄλλά; the discontinuity component is what separates it from καί. This led me to postulate the existence of a (dis)continuity cline in Ancient Greek (101) where δέ is located in the middle. Note that this cline of (dis)continuity is correlated with these DMs, but that it actually refers to the contexts in which these markers occur – a very discontinuous context, for instance, would induce the use of an ἄλλά. Given the fact that there are only three DMs (and possibly asyndeton) correlating with this (dis)continuity cline, there are bound to be some instances in which two DMs can possibly be inserted – for example, those cases which are pretty discontinuous (in an intuitive, native speaker sense) could include either a καί or a δέ. Of course, the possibility cannot be excluded that more DMs (or even other items or expressions) could be attached to the cline, which would lead to a more fine-grained understanding of how (dis)continuity works in Ancient Greek.

Obviously, the idea of the (dis)continuity cline needs more work, but it would explain why analyses of δέ (including my own here) have remained so vague – it is a DM which is correlated with somewhat discontinuous contexts, of which there are many. Indeed,

we have come across $\delta\acute{\epsilon}$ in contexts which provide evidence, explain a previous assumption, contrast two assumptions, reformulate, simply coordinate, and so on. On a coherence approach, $\delta\acute{\epsilon}$ would be, at the very least, extremely polyfunctional – it could indicate several different seemingly unrelated coherence relations. On a RT view, however, its function lies in context selection and separating assumptions.

$\Delta\acute{\epsilon}$'s generality is also reflected in the different translations proposed here. In the majority of cases, it is translated as *and*, *but*, *or* (in reformulations), or, sometimes, by a punctuation mark (see also Black 2002: 142). This is again indicative of the range of contexts in which it can appear, and the wide applicability of its function. It would be very difficult to propose a function which could take all these contexts into account and which would still be highly specific – note, in this respect, the high frequency of $\delta\acute{\epsilon}$ discussed in the preceding section. At the same time, I do think, with Black (2002), that a single general function can be proposed which unifies all examples of $\delta\acute{\epsilon}$. While I think Black's proposal for $\delta\acute{\epsilon}$'s meaning – centered around 'low- to mid-level discontinuity', and its implicit notion of a cline of discontinuity – is a compelling one, it is flawed in that it is not contrasted with other types of discontinuity.

Contrary to Black's 'low- to mid-level discontinuity', the meaning presented here for $\delta\acute{\epsilon}$ is specific enough to set it off against the other (dis)continuity markers (that is, $\kappa\alpha\acute{\iota}$ and $\alpha\lambda\lambda\acute{\alpha}$). This is the main advantage of my approach *vis-à-vis* earlier analyses – it delineates $\delta\acute{\epsilon}$ from other DMs within the larger ecology of Ancient Greek (dis)continuity, but it does not fall into the trap of equating $\delta\acute{\epsilon}$'s function(s) with the contexts in which it occurs. In addition, it simply fits the data better – especially those instances which contain obvious continuity – without having recourse to the notion of coherence.

In most cases, it would seem good practice to follow De Saussure (2011) in assuming that an item is conceptual unless there is decisive evidence that it is procedural. While there is no surefire way to be sure $\delta\acute{\epsilon}$ is procedural following the set of criteria proposed in the secondary literature, however, the difficulty many analysts have encountered in describing its meaning or offering a translation seems to point to some sort of introspective inaccessibility – even though it is impossible to be sure, given the lack of native speakers. Paired with its apparent non-compositionality, it would seem that $\delta\acute{\epsilon}$ is a procedural element of the Ancient Greek lexicon.

As stated, the procedural role I proposed for $\delta\acute{\epsilon}$ may come across as somewhat underwhelming – it is pretty vague, very general and seemingly quite straightforward. However, its function has to be seen against the background of Ancient Greek coordination. $\Delta\acute{\epsilon}$ is extremely common in Homer and probably developed as a counterpart for asyndeton – it separates different assumptions from each other without cutting the contextual links which bind these assumptions into an overarching whole. It appears less often in my corpus of Atticistic texts than it does in Homer, but it is still by far the most commonly occurring DM of the ones under consideration in this dissertation. Additionally, its function is, at its core, still very much the same – it

separates assumptions from each other while relying on the previously communicated assumptions for its interpretation. This makes it particularly likely to appear in certain contexts. Contrast, for instance, frequently involves at least $\delta\acute{\epsilon}$ (and often $\mu\acute{\epsilon}\nu$ as well) – it relies on the audience comparing two assumptions which are in some sense semantically opposite. By marking the latter assumption with $\delta\acute{\epsilon}$, the speaker can signal that this assumption is a separate one, but that it yields positive cognitive effects in light of the preceding assumption.

To sum up, the rule encoded by $\delta\acute{\epsilon}$ can be described schematically as follows (X and Y indicate separate assumptions):

$$(102) [X\dots] [\delta\acute{\epsilon} Y\dots]_X$$

Brackets indicate the closing off of an assumption; the X in subscript indicates that this assumption functions as the background for the interpretation of assumption Y. $\Delta\acute{\epsilon}$'s function lies in separating the two assumptions and indicating the contextual continuity schematized by the subscripted X. For comparison's sake, $\kappa\acute{\alpha}\iota$ and $\acute{\alpha}\lambda\lambda\acute{\alpha}$ would be represented as follows, respectively:

$$(103) \text{ a. } [X\dots \kappa\acute{\alpha}\iota Y\dots] \\ \text{ b. } [X\dots] [\acute{\alpha}\lambda\lambda\acute{\alpha} Y\dots]$$

$\kappa\acute{\alpha}\iota$ links two utterances in a single assumption – they achieve relevance as a whole. In other words, the assumption is not closed off by the insertion of $\kappa\acute{\alpha}\iota$ but, instead, continues on. With $\acute{\alpha}\lambda\lambda\acute{\alpha}$, there is no contextual continuity. Note that $\acute{\alpha}\lambda\lambda\acute{\alpha}$ can also occur in the following context:

$$(104) [\text{NEG } X\dots] [\acute{\alpha}\lambda\lambda\acute{\alpha} Y\dots]$$

Where NEG indicates that assumption X is denied by a negation. This type of example could be schematized alternatively as follows:

$$(104') [\cancel{X\dots}] [\acute{\alpha}\lambda\lambda\acute{\alpha} Y\dots]$$

The script in (104') is different from the one in (103b), but this is not due to any polyfunctionality inherent in $\acute{\alpha}\lambda\lambda\acute{\alpha}$ – the negation indicates that assumption X should not be added to the audience's set of contextual assumptions, and $\acute{\alpha}\lambda\lambda\acute{\alpha}$ indicates which assumption should be added. As such, the use of $\acute{\alpha}\lambda\lambda\acute{\alpha}$ in a context like (104) is characterized by the lack of continuity with the preceding context, just as it in instances without a negation. The previous assumption (X) is deleted in favor of assumption Y in (104), and is hence marked as being irrelevant – just as the previous context is no longer

felt to be relevant for the interpretation of the utterance marked by ἀλλά in contexts without a negation. The point is that the deletion of the preceding utterance is marked by the negation in the previous utterance, not by ἀλλά.⁸³

The main drawback for my hypothesis is one which all Ancient Greek linguists have to deal with – the lack of negative evidence. The availability of a native speaker to test the limits of δέ's applicability, and to check which contexts are natural and which examples are less smooth, would obviously improve (or, less optimistically, disprove) the conclusions I have drawn here. The only way to do semantics of the kind I have tried to do here with a dead language, however, is to look at a wide range of examples and to extrapolate wider patterns between those instances. In that sense, my approach here is more deflationary than that of Bakker or Black, which is largely taxonomic. While I have investigated the contexts in which δέ appears mostly for what they have in common, their analyses look to distinguish between different uses which are more or less related. While this type of research unquestionably has its merits, I hope to have shown that all instances of δέ in my corpus can be connected through a single procedural function, which I have termed 'continuity-within-discontinuity'.

⁸³ To test this hypothesis, it may be interesting to look at which use developed first – the one with the negation, or the one without? If the former were true, and the sharply discontinuous use developed out of the negation use, then ἀλλά's basic function may be related more to negation than it is to sharp discontinuity. Many languages make a lexical distinction between a 'contrast' *but* and a 'negation' *but* (see e.g. Olmos & Ahern (2009) and Olmos et al. (2011) on Spanish *pero* (contrastive) and *sino* (used with negations)). At first glance, this distinction may seem to be active in Ancient Greek as well – δέ would indicate contrast (and would hence be similar to *pero*), and ἀλλά would point to the denial of a previous assumption (and would hence be similar to *sino*).

There are two main problems with the hypothesis outlined here: δέ occurs often in non-contrastive contexts (similarly to Spanish *y*, the standard connective), and it also occurs with negators (see example (96) *supra*). As such, a negation does not automatically induce the use of ἀλλά, as it does with *sino* in e.g. Spanish.

Chapter 4

A relevance-theoretic analysis of γάρ's semantics

In this chapter, we're moving on to γάρ's semantics. As in the δέ chapter, I will first discuss how scholars have tended to approach its meaning, before turning to my own analysis. In §4.2, I present examples which resist an account in coherence or functional terms (§4.2.1), and work towards a procedural rule which is unitary and able to deal with a larger number and variety of γάρ instances (§4.2.3). This procedural rule is centered around the notion of contextual anchoring – γάρ indicates that the upcoming assumption will make another utterance easier to understand or believe. In §4.2.2, I get into whether or not γάρ is procedural (though in a more limited sense than I did for δέ, as many of the arguments there are applicable here as well). I also look at the case of ἀλλὰ γάρ (§4.2.5), a collocation of two DMs which presents problems for both earlier approaches and my analysis. In §4.3, I formulate my conclusions.

4.1 Existing approaches to γάρ

I already discussed the broad outlines of earlier approaches to γάρ in the first chapter – analyses have evolved from a mainly explanation-based one towards a mainly subsidiarity-based one. In the first section here, I go into more detail about the differences between the various scholars who have proposed accounts of γάρ's meaning. The discussion of these earlier views here may be familiar from the first chapter, and will be much shorter than the one on δέ in the previous chapter – however, some additional examples will make these scholars' general points clearer, and will provide a platform for my own exploration of γάρ's semantics.

4.1.1 Stage II approaches to γάρ: causality, explanation, motivation, confirmation, ...

Denniston provides a list of possible uses of γάρ (1954²: 58-95). It is not always clear where Denniston means to draw the line between these different uses; equally important is the observation that Denniston's approach is almost exclusively taxonomic.

According to Denniston γάρ can be used confirmatorily/causally¹; another use he proposes is the 'explanatory' one ("nearly related to the confirmatory" (id.: 58)) – for examples, see (20), (32), (33) and (36) in chapter 1. We also get 'anticipatory' γάρ – yet this seems to be the same use as the confirmatory/causal/explanatory use, the only difference being that the utterance marked by γάρ precedes or breaks up the causally explained utterance (instead of following it).² It is also used to mark answers and elliptical questions (such as τί γάρ; (*what then...?*) or πῶς γάρ; (*how then...?*) – see id.: 85):

(1) [...] ἄλλ' ἴθι νῦν Αἴαντα καὶ Ἰδομενῆα κάλεσσον
ρίμφα θέων παρὰ νῆας· ἐγὼ δ' ἐπὶ Νέστορα δῖον
εἶμι, καὶ ὀτρυνέω ἀνστήμεναι, αἳ κ' ἐθέλῃσιν
ἐλθεῖν ἐς φυλάκων ἱερὸν τέλος ἡδ' ἐπιτεῖλαι.
κεῖν' γὰρ κε μάλιστα πιθοίατο· τοῖο γὰρ υἱὸς
σημαίνει φυλάκεσσι καὶ Ἰδομενῆος ὀπάων
Μηριόνης· τοῖσιν γὰρ ἐπετράπομέν γε μάλιστα.
Τὸν δ' ἡμείβετ' ἔπειτα βοὴν ἀγαθὸς Μενέλαος·
πῶς γάρ μοι μῦθ' ἐπιτέλλεαι ἡδὲ κελεύεις; (Homer, *Iliad* 10.53-61)

[Agamemnon is calling for Menelaus to assemble the elder commanders of the Greek army.]

“But go now, call hither Aias and Idomeneus;
run swiftly along the ships. I will go to goodly Nestor
and bid him arise, if so be he will be minded
to go to the sacred company of the sentinels and give them charge.
To him [*gar*] would they hearken as to no other, his [*gar*] son
is captain over the guard, he and the comrade of Idomeneus,
Meriones; to them [*gar*] above all we entrusted this charge.’

¹ In one of Denniston's trademark flourishes, he notes that this use is “commoner in writers whose mode of thought is simple than in those whose logical faculties are more fully developed” (1954²: 58). Basil, Gregory and Heliodorus, whose texts contain many uses of γάρ which would be causal on Denniston's taxonomy, may have had a different view.

² See §4.2.4 *infra* for more on this ‘proleptic’ γάρ.

To him made answer then Menelaus, good at the war-cry:

‘How [*gar*] doth thou charge and command me in words?’” (tr. Murray (1924), with alterations)

The final γάρ would be an example of Denniston’s ‘how then...?’ use; the preceding three would be explanatory on a Dennistonian analysis. The first γάρ utterance indicates why Agamemnon would instruct Menelaus to ask Nestor to talk to the sentinels, and is hence epistemically causal (see §1.1.3.1 and ex. (16) there in particular). The next two are both examples of epistemic causality as well – the second γάρ utterance explains why Agamemnon thinks the ‘sentinels’ would listen to Nestor and the third one why he thinks Nestor’s son and Meriones have been made captains of the guard, respectively.

‘Assentient’ is yet another use: Denniston argues that, in some contexts, γάρ is used to mark utterances where the speaker confirms something (id.: 86-7):

(2) [...] τῇ δ’ ἐπιστήμῃ σύ μου

προὔχοις τάχ’ ἄν που, τὸν βοτῆρ’ ἰδὼν πάρος.

{Χο.} ἔγνωκα γάρ, σάφ’ ἴσθι. (Sophocles, *Oedipus Tyrannus* 1115-1117; from Denniston (1954²: 87))

[Oedipus thinks he recognizes a herdsman in the distance, but he’s not quite sure.]

“[Oedipus:] [...] But in knowledge you have over me

perhaps an advantage, it seems, if you have seen the herdsman before.

[Chorus:] I know him [*gar*], be sure.” (tr. Jebb (1887), with alterations)

Most Stage II approaches take a similar view to Denniston in that they assume that there is a large variety of possible uses for γάρ. Labéy (1950: 24) states that it has “une grande variété de nuances qui découlent les unes des autres.” Misener (1904) follows Denniston in providing a list of possible uses; these include a causal use along an explicative one (“explains, or develops the thought of either the whole sentence preceding, or, of a part of it”), a motivating one (“justifies the utterance of” the preceding utterance), and a confirmatory one (id.: 14). As with Denniston, it is not clear whether these uses are related or discrete – in the latter case, native speakers would have been able to distinguish them easily. Misener does argue that there is widespread agreement that γάρ “denote[s] causal relations” in “declarative sentences”, but that there are also different uses on which “scarcely two commentators agree throughout” (id.: 7). Given that Misener’s catalogue of possible uses for γάρ largely overlaps with Denniston’s categorization fifty years later, it is clear that this problem was not solved by the time *The Greek Particles* rolled off the presses.

This goes to the heart of the problem with Stage II particle research in general, and these scholars’ views on γάρ in particular: we are provided with a list of possible contexts in which γάρ can occur, and not with a discussion of what γάρ itself may

contribute to the utterance. Denniston, Misener and other Stage II particle studies amount to taxonomies of the contexts in which DMs can occur, not analyses of the meaning of the different DMs.³ This tendency was already discussed for δέ in the previous chapter – as Black (2002: 19) puts it,

“Denniston follows in the tradition of earlier grammarians in the proliferation of categories under which instances of various particles [i.e., DMs, SZ] are handled, so that δέ, for example, is treated separately as continuative and as adversative, as well as under a grouping of ‘particular uses’ – an exercise which amounts to a comprehensive survey of semantic contexts in which δέ may be found while indicating little about what δέ itself contributes to such a variety of contexts.”

In other words, we need to distinguish between the contexts in which a DM occurs, and the semantic contribution the DM makes to that context – as we did for δέ. A taxonomic approach of this kind is only the beginning of the story, and it should give rise to many different questions – most of which will be familiar from the δέ chapter:

- If γάρ marks, for example, a ‘motivation’ of a previous utterance, does it necessarily contribute the information that the utterance is a motivation? Or is γάρ, in its most basic sense, causal, and are all the contexts in which it appears all ‘causal’ in some sense?
- If so, would γάρ then indicate that the utterance which it marks is causal in some sense, and could its meaning then be understood as indicating that causality? Or could γάρ encode a more general or abstract function which would be highly salient in causal (motivational, confirmatory, explanatory, ...) contexts?
- In fact, can (and should) we extrapolate one overarching use for γάρ based on the different contexts in which it can occur, or are there different uses (i.e., is it polysemous/polyfunctional)?
- If it is polysemous/polyfunctional, how many distinct meanings or uses are there? And how should we distinguish these? Is there, for instance, a functional difference between a γάρ which marks a ‘motivation’ and a γάρ which marks an ‘explanation’? Are these two different uses of γάρ, or is it the same use in slightly different contexts?

None of these questions is answered – or even raised – in Stage II research.

³ Other Stage II analyses of γάρ include Smyth (1920: 2803-2820), whose (taxonomic) approach is in line with Denniston’s; and Poythress (1984: 319-320), who argues that γάρ usually introduces “a reason or | ground or some kind of vague logical support for what precedes”. Thrall (1962: 47) sees γάρ as primarily causal, while Levinsohn (1987: 91) states that it “introduces an explanation or exposition of the last assertion recorded”.

As with δέ, Stage II approaches are also faced with γάρ examples which do not fit the proposed mould. Denniston, who added a section on “apparently superfluous δέ” in his discussion of δέ, also notes “special difficulties” with γάρ (1954²: 95). An advantage of a taxonomic, polysemous account over a unitary, single-use one would presumably be that it would be fully equipped to deal with all instances of γάρ. However, as Denniston indicates, γάρ still occurs in contexts which cannot be located under any of the labels he proposes. This problem, however, is secondary to the crux of the largely taxonomic Stage II approaches: scholars here did important work in cataloguing the different contexts in which DMs can occur, but they had very little to say on what the precise semantic contribution of these DMs is. In Stage III approaches to γάρ’s function, the questions above seem to be more of a concern, and some steps in the direction of a properly semantic account can be found.

4.1.2 Stage III approaches to γάρ: explanation, elaboration, subsidiarity

At this stage, scholars begin to focus more on γάρ’s role in the discourse hierarchy. Sicking (1993: 20), for instance, argues that γάρ ‘subordinates’ its utterance to what came before. Sicking does not specify how this ‘subordination’ should be understood, but he presumably intends it to refer to the hierarchy of discourse segments – information marked by γάρ is, in some sense, less important than the information which precedes it. As such, it can be considered a PUSH marker in Polanyi & Scha’s (1983) sense – these DMs point to the subsidiarity of the upcoming discourse segment (see also Slings 1997). Interestingly, Sicking also touches on the mindreading role which is often involved in γάρ utterances⁴ (see §4.2.4) – γάρ often marks information which the speaker assumes will provide answers for questions which the previous utterance(s) might have raised for the audience. This expected question on the hearer’s part often amounts to “why do you think so?” or ‘... ask that?’, according to Sicking (1993: 24; cf. also already Denniston 1954²: 60). This amounts to saying that γάρ often introduces epistemically or speech-act causal utterances – the former explain how the speaker knows something (i.e., provide evidence for an assumption), the latter why she says (or asks, or requests, and so on) something (see (4) *infra*):

(3) Πυρκαϊῆς δὲ γινομένης θεῖα πρήγματα καταλαμβάνει τοὺς αἰελοῦρους. Οἱ μὲν γὰρ Αἰγύπτιοι διαστάντες φυλακὰς ἔχουσι τῶν αἰελοῦρων, ἀμελήσαντες σβεννύναι τὸ

⁴ As in the previous chapter on δέ, I will use ‘γάρ utterance’ or ‘γάρ segment’ as shorthand to refer to ‘an utterance/segment which is marked by γάρ’.

καίόμενον, οἱ δὲ αἰέλουροι διαδύνοντες καὶ ὑπερθρώσκοντες τοὺς ἀνθρώπους ἐσάλλονται ἐς τὸ πῦρ. (Herodotus, *Histories* 2.66.9-13)

[Herodotus is discussing Egyptian cats.] “When a fire occurs, the cats seem to be divinely possessed; while the [*gar*] Egyptians stand at intervals and look after the cats, not taking any care to extinguish the fire, the cats, slipping through or leaping over the men, jump into the fire.” (tr. Macaulay 1890)

In the γάρ utterance, Herodotus describes the reason (i.e., provides evidence) for why he thinks the cats seem to be divinely possessed when they are close to a fire – hence, γάρ introduces an epistemically causal utterance.

However, the idea that γάρ only (or even often) marks epistemically or speech-act causal utterances constitutes a very narrow view of its function, driven largely by the fact that Sicking only takes Lysias (and hence argumentative discourse) into account. As we will see, γάρ utterances do indeed usually involve some sort of anticipation of the hearer’s cognitive processes on the speaker’s part, but this is to be construed in a much less restrictive sense than Sicking proposes here. Another problem with Sicking’s analysis was already pointed out earlier – other DMs can mark utterances which could be interpreted as containing subsidiary information (see also (35) in §3.2.2). Conversely, γάρ can also mark information which is emphatically not subsidiary in my corpus, as I will demonstrate shortly (see also (5) in §2.1.4). Hence, while I do think Sicking is on the right track in his analysis of γάρ, I also believe that his analysis can still be improved.

Black’s (2002) approach is very much in line with Sicking’s, and, as such, suffers from the same drawbacks. She also believes that γάρ indicates communicative subsidiarity, but conceives of this function in a broader sense which better fits the data – according to her, it marks “supplementary information about (for example), states, actions, mental processes, or customary practices of participants in the narrative” and “helps make sense of events in the narrative framework” (2002: 260). She also draws a distinction between γάρ as it is used in narrative discourse and γάρ as it is used in expository discourse (although I do not believe that she intends to give the impression that she thinks that these are two distinct types of γάρ) – in expository discourse, γάρ is used in contexts which “strengthen and/or confirm a preceding proposition” (2002: 262). In addition, Black’s analysis has recourse to the mentalistic view of coherence relations, arguing that γάρ “signal[s] discourse relations between the sentences [...] – that is, how the sentences are to fit together in a mental representation of the discourse” (ibid.). As discussed extensively in chapter 2, this view of discourse relations (presented in its most comprehensive form in the work of Ted Sanders and colleagues) has no credible psychological basis. Although I think that Black’s proposal for γάρ’s function, like Sicking’s, is certainly valuable – and although her proposal, unlike Sicking’s, takes both narrative and expository discourse into account –, the same concerns I noted for

Sicking's proposal are relevant here, as are the fundamental problems with a mentalistic account of coherence relations.

Redondo Moyano (2004) argues that γάρ's main function lies in signaling that an elaboration will follow. The information it marks is 'complementary' to the preceding utterance, and helps the hearer interpret the latter correctly (2004: 18). As outlined in §2.1.3, the 'elaboration' introduced by γάρ can take many forms: Redondo Moyano subsumes causes, justifications, proof, testimony, exemplifications, descriptions, affirmations, confirmations under her 'elaboración' – among other relations. Her approach is perhaps most in line with Denniston's and Misener's – it is again more a taxonomy of the contexts in which γάρ appears than an analysis of what γάρ itself means.

Bakker's (2009) analysis is very similar – she argues that γάρ marks an utterance “as an explanation, exemplification [sic] or digression with regret to the main story line, and thus as less relevant than the preceding utterance(s)” (2009: 41). It is not clear what the relation is between these three – do they amount to different uses of γάρ and hence to polysemy (or polyfunctionality)? Or are there three different contexts in which γάρ can be used? If the latter, why only three? Shouldn't the range of contexts in which γάρ can be used be extended to include (at least) justifications and testimony, as Redondo Moyano's (2004) taxonomy does? As noted in §2.1.3, there is also no further elaboration of what Bakker means by these terms – there is no definition or even an intuitive description of what the functional difference is between an 'explanation' and an 'exemplification', for instance. In the same vein, she does not give any explanation as to how one DM can mark coherence relations which are intuitively as different as 'explanation' and 'digression'.

Bonifazi (2008) analyzes γάρ as a 'procedural' DM – although, as she notes in Bonifazi (2012), this is meant to be synonymous with 'a DM which functions at Kroon's (1995) presentational level', and not the relevance-theoretic notion of the concept. According to her, γάρ's function lies in “indicating why the immediately preceding discourse act has been performed” (2008: 46). As such, it functions at Sweetser's (1990) speech-act level, providing an answer to the implicit question 'why do I say that?' – with 'that' referring to (elements of) the preceding utterance (Bonifazi 2008: 47). Bonifazi's (2008: 46) own example is not really that convincing, but her larger point that γάρ can mark speech-act causality does seem to ring true:

(4) Θεασάμενος δὲ αὐτὸν ὁ Θύαμις «ἼΩ ἡγαθέ» ἔφη «Θεάγενης, οὐχ ὁρᾷς ὅπως τῷ δέει πάλλεται ὁ Πετόσιρις;» «Ὅρῳ» ἔφη, «ἀλλὰ πῶς χρήσι τοῖς προκειμένοις; οὐ γὰρ ἀπλῶς πολέμιος ἀλλὰ καὶ ἀδελφὸς ὁ ἐναντίος.» (Hel. Aeth. 7.5.4.1-5)

[Petosiris and Thyamis are on the verge of doing battle:] “At the sight of him [i.e., Petosiris, SZ] Thyamis remarked: ‘My dear Theagenes, do you not see how Petosiris is quaking with fear? ‘I see that’, he replied, ‘but how are you going to deal with the

situation? It is not [*gar*] simply an enemy, but one who is also a brother here opposed to you.”

Theagenes provides the reason for why he asks his question – put differently, the γάρ utterance provides the assumption which incited Theagenes’ preceding question. If Petosiris was just an enemy, Theagenes wouldn’t ask Thyamis how he would deal with the situation, but given that they are brothers as well, the situation may require a more delicate touch (as Theagenes seems to suggest here). Despite examples like these, we will see that γάρ’s function should be construed much more broadly, and that it can be used in contexts which do not involve speech-act causality – or any type of causality, for that matter.

In sum, scholars who have analyzed γάρ have tended to focus on the contexts in which γάρ can occur, rather than the meaning or function of the DM itself. Notable exceptions are Sicking (1993) and Black (2002), who both argue that it indicates some sort of communicative subsidiarity. These two studies will form the basis of my own account, according to which γάρ encodes, at its core, a procedural rule which instructs the hearer to take the upcoming utterance as containing contextual assumptions necessary to derive the speaker-intended interpretation of the preceding utterance. To get at γάρ’s meaning, we need to look at the contexts in which it occurs, of course – yet we should not remain stuck at this stage of the analysis. Instead, we should use it as a springboard to develop a well-founded account of γάρ itself.

4.2 Towards a procedural rule for γάρ: problems and perspectives

In this section, I will first (§4.2.1) discuss how existing accounts of γάρ’s meaning can be applied to my corpus of texts – and, particularly, where they are stretched to their limits and beyond. I will examine (and ultimately discard) three different hypotheses. Before turning to my own hypothesis, I analyze (briefly) whether γάρ is procedural (§4.2.2). Then comes the core part of this chapter – a discussion of γάρ’s semantics in light of the various contexts in which it appears (§4.2.3). These contexts are tied together in the following section, where a unitary function is gleaned from the preceding analysis (§4.2.4). I also discuss the collocation ἀλλὰ γάρ (§4.2.5), which is odd on any account (including my own) – I argue that this combination can be explained away under my proposal for γάρ’s function, but not on earlier ones. Finally, I turn to

some general thoughts about the approach taken here – and why I think a semantic analysis of γάρ benefits from a relevance-theoretic framework (§4.3).

4.2.1 Problems with existing accounts

Previous analyses of γάρ’s meaning have focused on one of three options. Some have argued that it is ‘explanatory’; others that it is ‘elaborative’; and others that it indicates some sort of subsidiarity. Here, I want to look at the merits of each of these proposals in turn, starting with the explanatory one.

I don’t want to deny that γάρ often introduces information which can be considered to be somehow explanatory in my corpus. If this is taken to be representative of γάρ’s function, γάρ would encode the information that an Explanation⁵ relation holds between its segment and the preceding one, following Hobbs (1985: 13) definition of the ‘Explanation’ relation:

(5) Explanation: Infer that the state or event asserted by [the explanatory utterance, SZ] causes or could cause the state or event asserted by [the utterance which is explained, SZ].

It is no coincidence that I make mention of a non-Ancient Greek definition of an Explanation in (5) – coherence relations “have not yet been systematically analyzed” in Ancient Greek (Drummen 2013), which means that we must have recourse to English and/or cross-linguistic proposals for a theoretically acceptable perspective on the Explanation relation.

On this definition, an Explanation always involves some sort of causality. Under a coherence approach, however, γάρ would not be able to mark content causality – these utterances are truth-conditional, whereas DMs, under a coherence approach, are strictly non-truth-conditional (§2.2, §2.3.2.2). This does seem to be true – although γάρ seems to be able to mark utterances which are examples of content causality (such as (6) *infra* or (20’) in §1.1.3.2), these can just as easily be interpreted as epistemically causal ones. As Sweetser (1990: 77-78) points out, it is often very difficult to distinguish between instances of content and epistemic causality. Applying Occam’s Razor, and given a lack of instances which are categorically truth-conditional, γάρ does not seem to be truth-conditional – if there are no unimpeachably truth-conditional instances, a unitary non-

⁵ I will use a capital letter to denote coherence relations (e.g., ‘Explanation’). When I speak of ‘explanations’, however – in my own analysis, for instance –, I refer to the general concept of explanations, not the coherence notion. In other words, all Explanations are explanations, though the reverse is not true.

truth-conditional analysis seems preferable.⁶ As such, γάρ would mark only specific types of Explanations – that is, not those where the assumption it marks ‘causes or could cause the state or event asserted’ (content causality), but only those where the speaker indicates the cause for why she thinks the preceding state or event is the case (epistemic causality), or those where the speaker indicates why she performed the previous speech act (speech-act causality) (see e.g. De Jong 1997; Bonifazi 2008; Bakker 2009). This proposal does seem to apply to a great many examples (see (4) for a speech-act instance; also e.g. *Hel. Aeth.* 4.11.3.6):

(6) Τὰ αὐτὰ δὲ ταῦτα κἄν περὶ οὐρανοῦ εἴποιμεν· ὅτι οὐκ ἐξείργαστο οὐπὼ οὐδὲ αὐτὸς, οὐδὲ τὸν οἰκεῖον ἀπειλήφει κόσμον, ἅτε μήπω σελήνη μήτε ἡλίῳ περιλαμπόμενος, μηδὲ τοῖς χοροῖς τῶν ἄστρον κατεστεμμένος. Οὐπὼ γὰρ ταῦτα ἐγεγόνει. (*Bas. Hex.* II.1.28-32)

[Basil is discussing a verse from Genesis, viz. ‘The earth was invisible and unfinished’:] “These same things we could also say of the heavens – that they were not yet completed and had not received their natural adornment, since at that time they did not yet shine brightly because of the sun and the moon, and were not crowned by the choirs of the stars. Not yet [*gar*] did these bodies exist.”

(7) Τοξεύουσι δὲ οἱ τῆς κινναμωμοφόρου παίζειν πλέον ἢ σπουδάζειν τὴν τοξείαν ἐοικότες· πλέγμα γάρ τι κυκλοτερές τῇ κεφαλῇ περιθέντες καὶ τοῦτο βέλεσι κατὰ τὸν κύκλον περιπείραντες τὸ μὲν ἐπτρωμένον τοῦ βέλους πρὸς τῇ κεφαλῇ περιτίθενται τὰς δὲ ἀκίδας οἷον ἀκτῖνας εἰς τὸ ἐκτὸς προβέβληνται. (*Hel. Aeth.* 9.19.3.1-6)

[The Persians and Ethiopians are locked in battle. The Persian left flank is being put under pressure by a special cohort of the Ethiopian army – the troops from the ‘cinnamon-bearing country’:] “The men of the cinnamon country are used to a kind of archery that seems more like a sport than a business. A coiled plait [*gar*] they twine round their heads, in which they fix a circlet of arrows with the feathered ends enclosing their heads and the points projecting outwards like rays.”

(6) is epistemically causal – the γάρ utterance provides information which explains how the speaker knows that the heavens were not yet brightened by the heavenly bodies and the stars. (7) is epistemically causal as well – the γάρ utterance does not explain why the cinnamon-country people use a kind of archery which is playful, but explains how the narrator knows that they employ this kind of archery. In other words,

⁶ Note, however, that truth-conditional instances of γάρ would not be problematic under a relevance-theoretic, procedural account – procedurality and non-truth-conditionality need not overlap, as we have seen (§2.3.2.2). For other examples which allow a truth-conditional interpretation, see e.g. *Bas. Hex.* VIII.7.68; *Hel. Aeth.* 4.2.1.6 and 9.8.6.3.

the γάρ utterance provides evidence for the statement made in the preceding utterance. Again, we should differentiate between the context in which γάρ is used (an utterance which is epistemically causal *vis-à-vis* the preceding one), and the meaning of γάρ itself. By doing so, we can avoid a proliferation of functions in which a plethora of different γάρ's are postulated, correlating with the different contexts in which γάρ can occur.⁷ As discussed previously, this type of approach is not in line with Grice's Modified Occam's Razor.

In spite of examples like (6) and (7), there is a substantial number of examples which categorically do not fit under the γάρ-as-explanatory hypothesis.

(8) πῶς ὁ πολυτίμητος λίθος τὸ κουράλλιον χλόη μὲν ἐστὶν ἐν τῇ θαλάσῃ, ἐπειδὴν δὲ εἰς τὸν ἀέρα ἐξενεχθῇ, πρὸς λίθου στερρότητα μεταπήγνυται· πόθεν τῷ εὐτελεστάτῳ ζῳῷ τῷ ὀστρέῳ τὸν βαρύτιμον μαργαρίτην ἢ φύσις ἐνέθηκεν. Ἄ γὰρ ἐπιθυμοῦσι θησαυροὶ βασιλέων, ταῦτα περὶ αἰγιαλοὺς καὶ ἄκτας καὶ τραχείας πέτρας διέρριπται, τοῖς ἐλύτροις τῶν ὀστρέων ἐγκείμενα. (Bas. Hex. VII.6.15-22)

[Basil is discussing the wonders of the sea.] "How is it that a stone so much esteemed, coral, is a plant in the sea, and when once exposed to the air becomes hard as a rock? Why has nature enclosed in the meanest of animals, in an oyster, so precious an object as a pearl? The things [*gar*] which are coveted by the caskets of kings – these things are cast upon the shores, upon the coasts, upon sharp rocks, enclosed in oyster shells."

The γάρ utterance does not provide a reason for why nature enclosed a pearl in an oyster, or for why Basil is asking the question. Instead, it communicates an implicit premise underlying the preceding question. The dichotomy between the value of the pearl and the meanness of oysters, which was made explicit in the question, is made more salient by the addition of the assumption marked by γάρ – these precious pearls, coveted by kings, just wash up on shore, enclosed in something as trivial as an oyster shell.

(9) Ὡς δὲ ἡνύετο οὐδὲν, ἔτι καὶ πλέον ἢ πόλις ἐκτετάρακτο καὶ δαιμονίαν εἶναι τὴν ἐπικουρίαν εἰκάζουσα «Καθαρὸν τὸ γύναιον, ἀναίτιον τὸ γύναιον» ἀνεβόα καὶ προσιόντες ἀπὸ τῆς πυρᾶς ἀπεσόβουν, τοῦ Θυάμιδος ἐξάρχοντος καὶ τὸν δῆμον εἰς τὴν βοήθειαν ἐπιρρωννύντος (ἥδη γὰρ κάκεῖνος παραγεγόνει τῆς ἀπείρου βοῆς τὸ γινόμενον μηνυούσης), καὶ τὴν Χαρίκλειαν ἐξελέσθαι προθυμούμενοι πλησιάζειν μὲν οὐκ ἐθάρσουν ἐξάλλεσθαι δὲ τῇ κόρῃ τῆς πυρκαϊᾶς ἐνεκελεύοντο. (Hel. Aeth. 8.9.15.1-9)

⁷ For more on this point, see e.g. Blakemore (1992: 79-80) on *and*.

[Chariclea is being burned on a pyre; however, the flames are retreating from her, in spite of valiant efforts from her executioners to fan the flames and her own desire to run into them.] “(The tormentors for their part ceased not to lay on wood and reeds – Arsace with threatening nods charging them so to do – to make it burn more fiercely:) but it did no good, and it troubled the people even more, who, supposing that she had help from heaven, cried: ‘The woman is clean, the woman is not guilty’; and coming to the fire, put the tormentors aside. The first that so did was Thyamis – by this time [*gar*] he too had come, being informed of what was done by the great noise in the city – who encouraged the people to help her. And they wanted to deliver her but durst not come near the fire, and urged her to step out herself.”

Here, the γάρ utterance communicates a non-causal implicit premise of the preceding utterance. The information provided amounts to an aside which explains how Thyamis – who had disappeared from the narrative’s view – came to be a spectator here, but it does not explain why Thyamis was the first to cry out against Chariclea’s sentence, or why the narrator here says that Thyamis was the first one to do so. What it does communicate is how Thyamis *was able* to cry out here – for the audience, it is not at all clear how Thyamis would be present here. With the addition of the γάρ utterance, both Thyamis’ presence and the reason for it are made explicit. Put differently, the γάρ utterance lies at the basis of the previous utterance as a premise which necessarily precedes the action described there, but it does not explain (in the causal sense) why that action took place.

(10) Τάχα ἂν μικρὰ λίαν ἐγκαλεῖν δόξαιμι, καὶ τὰ μέγιστα τοῖς μικροῖς καθυβρίζειν. Πλήν γε ὁμολογείσθω, ὅτι οὐκ Ἦλυσίων πεδίον ἄξια ταῦτα, οὐδὲ τῆς Ῥαδαμάνθους ἐκεῖσε δόξης, ἧς μοίρας ἀξιοῦσιν ἐκεῖνον οἱ τῆς αὐτῆς φρατρίας τε καὶ τάξεως. Ἐν τῶν ἐκείνου θαυμάζειν ἔχω· πολλοὺς γὰρ τῶν αὐτῷ συνήθων τε καὶ γνωρίμων, ἐκ τῶν κατὰ τὴν Ἀσίαν διατριβῶν μάλιστα, ἐκάλει μὲν κατὰ πᾶσαν σπουδὴν, ὡς δράσων θαυμάσια, οἷα καὶ ταῖς ἐλπίσιν ἐπτέρου, μεμνημένους τῶν ὑποσχέσεων· ἐπεὶ δὲ παρεῖεν, τοῦτο ἐκεῖνο αἱ τῶν ψήφων κλοπαὶ, καὶ τῶν ὄψεων ἀπάται· τοὺς μὲν τοὺς δὲ τὸν τρόπον, τοὺς δὲ τὸν διαπαίζων· ἔστι δὲ οὗς καὶ τραπέζῃ φιλοφρονούμενος, καὶ πολὺ τὸ Ἐταῖρε προπίνων, καὶ λαρυγγίζων ἄντ’ ἄλλου τινὸς δελεάσματος, ἀπράκτους ἀπέπεμπεν, οὐκ ἔχοντας ὅτῳ μέμφονται πλέον, ἐκείνῳ τῆς ἀπάτης ἢ σφίσιν αὐτοῖς τῆς κουφότητος. (Greg. *Iul.* II.688.38-II.689.14)

[Gregory is recounting Julian’s different transgressions against the Christians.] “But perhaps by blaming him for very trifling things I shall be thought to disparage very important matters through others inconsiderable; nevertheless, it must be owned that such conduct is not deserving of the Elysian Fields, nor of the glory of a Rhadamanthus in the next world, a lot which those of the same fraternity and order claim for him. One thing in his conduct I have to admire. Many [*gar*] of his former companions and

acquaintances, principally from the schools in Asia, he summoned to him with all haste, to do wonderful things for them, as he excited them to hope when they remembered his fine promises. But when they were arrived, this was ‘the deceits of counters and the illusions of dreams’, for some he befooled in one way, some in another, and some he played with; for there were whom he entertained at table, and drank to, with much bawling out of ‘My friend’, and after all sent them about their business disappointed, not knowing whom to blame the most – him for the deception, or themselves for their credulity.”

The γάρ utterance fills in the ‘one thing’ (ἓν) which Gregory deems admirable in Julian’s conduct. This ‘thing’ is given form through an entire utterance, in which Gregory details how Julian deceived his pagan friends into thinking he was going to confer on them some advantage or other. The γάρ utterance cannot be considered to be explanatory in any interesting sense – it does not explain why Gregory admires Julian’s treatment of his friends, and it does not explain why Gregory says (or how he knows) that he admires this type of conduct. Instead, it makes explicit what it was that Gregory admired in Julian’s conduct.

(11) «Ταυτὶ μὲν ἄριστα, ὦ Σισιμίθρη» πρὸς αὐτὸν ὁ Ὑδάσπης «καὶ ὥς ἂν τις ἐκθυμώτατα συνηγορῶν μᾶλλον ἢ δικάζων. Ἄλλ’ ὅρα μὴ μέρος τι λύων ἕτερον ἀνακινεῖς ἀπόρημα δεινόν τε καὶ οὐδαμῶς ἀπολύσασθαι τὴν ἐμοὶ συμβιοῦσαν εὖπορον· λευκὴν γὰρ πῶς ἂν Αἰθίοπες ἀμφοτέρω παρὰ τὸ εἶκος ἐτεκνώσαμεν;» (Hel. Aeth. 10.14.5.1-7)

[Sisimithres is trying to convince Hydaspes that Chariclea is his daughter. He is not convinced:] “‘This is all very well, Sisimithres,’ said Hydaspes to him, ‘and you have rather have defended this cause as an advocate than as a judge. But beware that, while you take away part of this doubt, you rouse not another hard puzzle and one in no way easy for my wife to resolve. [Gar] how is it reasonably possible that we, being both Ethiopians, should beget a white child?’”

The utterance preceding γάρ introduces an entity which is developed in the γάρ utterance. In this case, this entity is the ἀπόρημα – the ‘question’ or ‘puzzle’ which Hydaspes refers to. The question itself is marked by γάρ, but this utterance cannot be analyzed causally (or subsidiarily, for that matter) – the γάρ utterance does not explain why Sisimithres should watch out in raising his question, or why Hydaspes says that Sisimithres should watch out for this. The γάρ utterance, instead, fills out a vague, general and incomplete element of the preceding utterance – the ἀπόρημα. It is only with the addition of the γάρ utterance that Heliodorus’ audience (and Sisimithres) can begin to make sense of the ‘question’ which Hydaspes made reference to in the preceding utterance. It could be argued that ἀπόρημα (and ἓν in (10)) functions as a shell in Schmid’s (2000) sense – it provides a conceptual ‘shell’ which functions as a label

for its content (2000: 13). The semantic focus, then, lies not so much on the shell, but on what it contains. An example of a shell noun construction in Schmid's sense is underlined in (12):

(12) The other question is, what should the Soviet Union actually [...] (adapted from Schmid 2000: 169).

'The other question' (note the similarity to *ἕτερον ἀπόρημα*, 'another puzzle') provides a frame for interpreting the upcoming question, which, of course, forms the 'meat' of the utterance. The same is true for the *γάρ* utterance in (10). Although there are clear differences between examples like (12) and those like (11) (and (10)), the similarities between the two demonstrate that *γάρ* need not mark causal (or even subsidiary) information. Moreover, they provide an intriguing window on *γάρ*'s meaning and function – I will return to these shell contexts later on (§4.2.3.5).

In light of instances like this, which are categorically non-explanatory, the notion of Explanation would have to be stretched to its breaking point to salvage the hypothesis that *γάρ* marks Explanations. The original, tightly circumscribed definition (corresponding roughly to [causal + subsidiary]) would gradually be expanded to cover more instances. In other words, the Explanation hypothesis is too strong – it leaves many examples of *γάρ* out of the equation.

The problem may lie with Hobbs' (1985: 13) definition of the Explanation relation in (5). However, other coherence accounts do not really offer a satisfactory alternative – as already noted in §2.1.2-2.1.3. Hovy & Maier's model, which takes other researchers' proposals into account, does not even *have* an Explanation relation – it can presumably be subsumed under the 'Elaboration' relation (1995: 14). An 'Elaboration', on this view, would include those instances which are explanatory, but much more besides – according to Halliday (1985), for instance, an Elaboration would cover reformulations, exemplifications, and even those contexts where the speaker provides additional detail about the previous state of affairs (see also Mann et al. 1989: 53).⁸ Folding the Explanation relation into an overarching Elaboration relation would lead to a single concept which could cover a host of different relations. Intriguingly, Redondo Moyano (2004) argues that *γάρ* marks Elaborations, not Explanations – this is, then, besides the explanatory hypothesis, a second way of looking at its function. On this view, 'elaboration' would be an umbrella term for a host of other coherence relations – including the Explanation relation as it was defined in (5), but also Reformulations, Exemplifications and what can be termed 'Elaboration in the narrow sense':

⁸ See §2.1.2 for a more detailed overview of the 'Elaboration' relation in coherence analyses.

(13) Elaboration in the narrow sense: the utterance provides “additional detail about the situation or some element of subject matter which is presented in [the utterance which is elaborated on, SZ] or inferentially accessible in [the utterance which is elaborated on, SZ]” (Mann et al. 1989: 53; see also Wolf & Gibson 2005: 256-7).

Several γάρ utterances could be considered Elaborations in this sense – they provide ‘additional detail’ about the situation presented in the preceding utterance (note that, henceforth, I will use ‘elaboration’ to refer to the cover term and ‘Elaboration’ to refer to Elaboration in the narrow sense):

(14) Καὶ ἐποίησεν ὁ Θεὸς τοὺς δύο φωστῆρας τοὺς μεγάλους. Ἐπειδὴ τὸ μέγα τὸ μὲν ἀπόλυτον ἔχει τὴν ἔννοιαν· ὡς μέγας ὁ οὐρανὸς, καὶ μεγάλη ἡ γῆ, καὶ μεγάλη ἡ θάλασσα· τὰ δὲ ὡς τὰ πολλὰ πέφυκε πρὸς ἕτερον ἀναφέρεσθαι· ὡς μέγας ὁ ἵππος, καὶ ὁ βοῦς μέγας (οὐ γὰρ ἐν τῇ ὑπερβολῇ τῶν τοῦ σώματος ὄγκων, ἀλλ’ ἐν τῇ πρὸς τὰ ὅμοια παραθέσει τὴν μαρτυρίαν τοῦ μεγέθους τὰ τοιαῦτα λαμβάνει). (Bas. Hex. VI.9.1-8)

[Basil is discussing the following verse from Genesis:] “‘And God made two great lights.’ The word great has an absolute sense, as in ‘great is the heaven’, and ‘great is the earth’, and ‘great is the sea’. But ordinarily it has only a relative meaning, as in ‘great is the horse’, and ‘great is the ox’. It is not [*gar*] that these animals are of an immoderate size, but that in comparison with their like they deserve the testimony of ‘great’.”

The γάρ utterance explains how ‘relative meaning’ (πρὸς ἕτερον ἀναφέρεσθαι) is to be understood as it applies to horses and oxen. There is no real causality here; rather, the γάρ segment provides an assumption which makes the preceding utterance easier to understand. As such, the γάρ utterance here would amount to a Elaboration in that it provides additional detail about the preceding situation.

(15) Τί τοῦτο, ὦ θειότατε βασιλέων καὶ φιλοχριστότατε (προάγομαι γὰρ ὡς παρόντι καὶ ἀκούοντι μέμψασθαι, καὶ εἰ πολὺν κρείττονα γινώσκω τῆς ἡμετέρας μέμψεως, μετὰ Θεοῦ τεταγμένον, καὶ τῆς ἐκεῖ δόξης κληρονομήσαντα, καὶ τοσοῦτον μεταχωρήσαντα, ὅσον μεταθέσθαι τὴν βασιλείαν); (Greg. Iul. I.560.43-I.561.2)

[Gregory addresses the deceased emperor Constantius II, censuring him for appointing Julian his successor.] “Why did you do this, O most religious and Christ-loving of princes! (I address you [*gar*] as though present here, and listening to my censure, even though I know you to be far above our fault-finding, placed at the side of God, and the inheritor of the glory there, and having retired so far as to receive the kingdom)?”

As in (14), there is no causality here – the γάρ utterance contains a comment by the narrator which metadiscursively goes into more detail on Gregory’s choice to address

the deceased emperor, but it does not explain why he chose to address the emperor. It again contains an assumption which helps Gregory's audience understand another utterance, at the same time framing his choice to address Constantius as a conscious choice and praising Constantius – ensuring that his audience does not take the question preceding the γάρ utterance to reflect undue anger or exasperation with the deceased emperor on Gregory's part.

(16) δίκαια δ' ἂν ποιοῖτε καὶ οἵτινες ἢ πόθεν ἔστε λέγοντες. Ὅτι μὲν γὰρ Ἕλληνες καὶ τοῦτο ἔγνων καὶ ὅτι τῶν εὖ γεγονότων πάρεστι τοῖς ὀρωμένοις τεκμαίρεσθαι, βλέμμα γὰρ οὕτω λαμπρὸν καὶ εὐσχήμων ὄψις ἅμα καὶ ἐπέραστος εὐγενείας ἔμφασιν παρίστησιν. Ἀλλὰ τῆς ποίας Ἑλλάδος ἢ πόλεως τίνος καὶ τίνες ὄντες ἢ ὅπως δεῦρο πλανηθέντες ἀφίκεσθε βουλομένη μοι μαθεῖν ὑπὲρ συνοίσοντος τοῦ ὑμετέρου κατείπατε, [...]. (Hel. Aeth. 7.12.4.10-7.12.5.4)

[Cybele has led Chariclea and Theagenes to the royal palace after Calasiris' death. She wants to know more about them:] “You would do right to also tell me who you are, and where you come from. That [*gar*] you are Greeks, I know; and that you are of good family, can be surmised by your looks – the brightness of your eyes, and the comeliness and charm of your appearance, produce a clear impression of good birth. But of what region of Greece, or which city are you? And who are you, or by what sort of wanderings have you made your way here? Tell it to me, I wish to learn it for your future benefit, [...].”

Once again, no strictly causal analysis is possible. The γάρ utterance does not explain why Cybele asks the question – instead, it expands on the previous question, indicating how, exactly, it is relevant. She doesn't want Theagenes and Chariclea to tell her that they're Greek, and that they're of high birth – she already knows that (as she makes clear in an utterance marked by μέν). What she does want to know, she makes explicit in an utterance introduced by ἀλλά – where precisely in Greece do they hail from, and what happened to them that they ended up here? As such, the γάρ utterance is an Elaboration in the sense that it provides additional detail about how the preceding question should be understood.

Exemplifications would be subsumed under the elaboration relation as well, following Halliday's (1985) definition:

(17) Πῶς οὖν ἐκεῖθεν τὰς προηγουμένας αἰτίας λέγων ὑπάρχειν τοῖς τῶν ἀνθρώπων βίοις, ἐκ τῶν παρ' ἡμῖν βοσκημάτων τῶν γεννωμένων ἀνθρώπων τὰ ἦθη χαρακτηρίζεις; Εὐμετάδοτος γὰρ ὁ κριανός, οὐκ ἐπειδὴ τοιούτου ἦθους ποιητικὸν ἐκεῖνο τὸ μέρος τοῦ οὐρανοῦ, ἀλλ' ἐπειδὴ τοιαύτης φύσεώς ἐστὶ τὸ πρόβατον. (Bas. Hex. VI.6.15-21)

[Basil is fulminating against people who think the zodiac belts affects the character and life of mankind.] “How, if you say that [i.e., in the zodiac belt, SZ] the principal

causes which influence the life of man are located there, do you take animals to characterize the manners of men who enter this world? He [*gar*] who is born under the Ram will be generous, not because this part of heaven gives this characteristic, but because such is the nature of the sheep.”

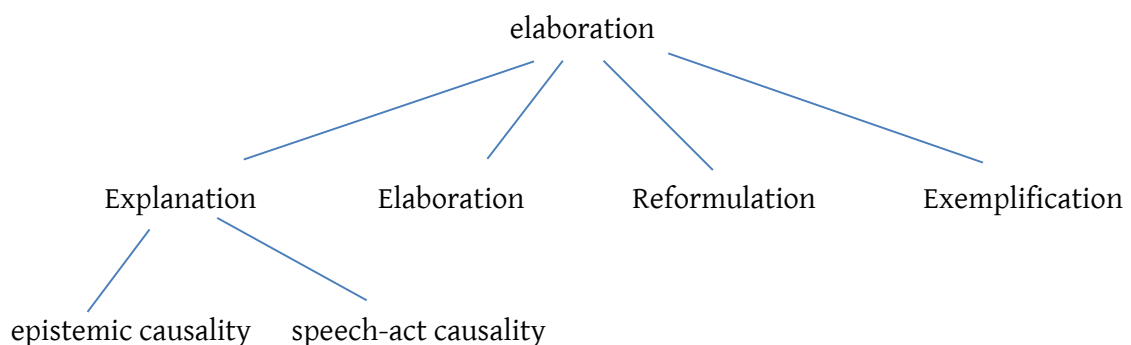
(18) ὅτι ἐνταῦθα μὲν αἱ τέχναι τῶν ὑλῶν ὕστεραι, διὰ τὸ ἀναγκαῖον τῆς χρείας παρειαχθεῖσαι τῷ βίῳ. Τὸ μὲν γὰρ ἔριον προϋπῆρχεν, ἡ δὲ ὑφαντικὴ ἐπεγένετο, τὸ τῆς φύσεως ἐνδέον παρ’ ἐαυτῆς ἐκπληροῦσα. Καὶ τὸ μὲν ξύλον ἦν, τεκτονικὴ δὲ παραλαβοῦσα. (Bas. *Hex.* II.2.42-6)

[Basil is arguing against the position that God only operated on (pre-existing) matter – according to him, people’s views are influenced by how things work here on earth:] “Here below arts are subsequent to matter – introduced into life by the indispensable need of them. Wool [*gar*] existed before weaving came into being, completing what it itself was naturally lacking. And wood existed, and carpentry operated on it.”

In both cases, the γάρ utterance provides illustrations of the previous state of affairs. In (17), Basil uses the sign of the ram to exemplify the position of his opponents – according to them, people born under this sign will be ‘liberal’ due to the nature of a ram. In (18), the γάρ utterance illustrates how art operates on matter: weaving can make it into something useful to man, as carpentry can for wood.

The elaboration hypothesis is weak enough to account for a wider range of examples than the explanatory hypothesis can. The two hypotheses, and the relation between two, can be summarized in the following figure:

Figure 4.1 Explanation and elaboration hypotheses



However, the elaboration hypothesis is still not weak enough. As we have seen (and will see for Reformulations), γάρ can be used in all of the contexts which are elaborative in the sense outlined above – Explanations, Reformulations, Exemplifications and Elaborations in the narrow sense (providing ‘additional detail’). Yet it is used even more

broadly – the ‘shell’ uses in (10) and (11), for example, cannot be considered to be elaborations. As such, elaboration as it is conceived here amounts to an intriguing starting point for an analysis of γάρ, but nothing more than that. It is also, as stated, largely taxonomic – γάρ can indeed appear in ‘elaborative’ contexts such as Explanations and Reformulations, but this does not give us a clear sense of what γάρ itself means. This is also the core problem with Redondo Moyano’s (2004) account of γάρ, which takes ‘elaboración’ to be its basic value. She gives no proper definition of what she means by this; instead, as stated above (§2.1.3, §4.1.2), she gives an overview of contexts in which γάρ appears, and which she subsumes under the heading ‘elaboración’. At the risk of repeating myself once too often, this is a valuable foundation from which to build an account of γάρ’s meaning – again, I know of no other way to do research on DMs in dead languages than to look closely at the contexts in which it occurs –, but it is quite far from a semantic analysis of γάρ’s meaning.

Another problem with the elaboration hypothesis is the lack of a unitary framework. This was discussed extensively in §2.1.2 (also §2.1.3), but it comes to the fore again here. On some accounts, Exemplification – which is subsumed under the Elaboration relation on Halliday’s analysis – is a separate relation (Kehler 2004: 249; Hobbs 1985: 20). On other approaches, Cause is taken to be separate relation (Hovy 1990)⁹ – in that case, ‘elaboration’ would not be able to cover those instances (of which there are a lot) where γάρ marks an Explanation in the strict [causal + subsidiary] sense. In the same vein, it is not exactly clear how we should construe the notion of Elaboration (in the narrow sense) – in particular, the notion of ‘additional detail’ does not seem to be particularly well-defined or circumscribed. Does an exemplification not provide ‘additional detail’ as well? What about a reformulation? I will take up this discussion again in §4.2.3.2.

These problems are, in turn, tangled up with questions about how we should construe the network of relation which are grouped under the ‘elaboration’ hyperonym. Are all the subsidiary coherence relations (e.g. Reformulation) equidistant to the overarching elaboration relation (as in Figure 4.1), or are some more prototypically elaborative, while others are more distantly related? Could these subsidiary relations (for example, a reformulation) function as nodes for subsidiary relations of their own (for example, non-paraphrastic versus paraphrastic reformulation, following Rossari (1994))? In fact, how many relations would we have to come up with before we would obtain a satisfactory map of the elaboration relation? And can all of these be marked by γάρ? Can these subsidiary relations exist outside of the ‘elaboration’ framework – can a Reformulation *not* be elaborative, for instance? These questions need to be grappled

⁹ On his model, the ‘Cause’ relation should be located under a different hyperonym than the Elaboration one (1990: 131).

with before an inclusive coherence-based account of γάρ can even be attempted. Yet I am not aware of an acknowledgment of these issues in previous work on γάρ, or even on elaborations in general – let alone a well-founded solution. In conjunction with the fact that the elaboration hypothesis is still too strong to account for the wide range of contexts in which γάρ can appear, I am not sure how a theoretically grounded account of γάρ as a marker of elaborations would go – even from a coherence point of view. Although the notion of ‘elaboration’ does seem to be intuitively relevant for a unitary account of γάρ’s meaning, it falls well short of the requirements for an acceptable analysis.

A third way of looking at γάρ’s function is through the lens of subsidiarity (e.g. Wakker 2009: 67; Slings 1997: 101).¹⁰ This is the weakest of the three hypotheses, and would strip the explanatory and elaborative proposals down to their bare bones. On this view, the only trait which would unite all uses of γάρ is that they are somehow less central to the narrative or the argument under development. While both the Explanation and elaboration hypothesis assume that the γάρ utterance is somehow subsidiary, they add other features – causality on the Explanation account; a menu of possible coherence relations on the elaboration account. From strongest to weakest, the three hypotheses would be ranked as follows:

(19) Explanation > elaboration > subsidiarity

This is due to the constitutive parts of these hypotheses – unpacked, they would be ranked as follows:

(19’) [causality + subsidiarity] > [(causality OR Reformulation OR Exemplification OR narrow Elaboration) + subsidiarity] > [subsidiarity]

Under the explanatory hypothesis, γάρ utterances would have to satisfy two criteria – they would have to be causal and subsidiary. On the elaborative hypothesis, γάρ utterances would have to satisfy two criteria as well, but there would be more leeway – they would have to be subsidiary, but the other criterion consists of a menu of possibilities. On the subsidiarity hypothesis, there is only one criterion. As such, it is the weakest of the three hypotheses. Put differently, every elaboration is also subsidiary, while every Explanation is an elaboration. (I will henceforth subsume the explanatory hypothesis under the elaborative hypothesis – as such, when I’m talking about ‘the

¹⁰ See also Kroon (1995: 168), who posits an identical function for Latin *nam*, of which she says that γάρ is “the Greek near-equivalent” (see §1.1.3.1).

elaborative hypothesis’ or ‘elaborations’, I will refer to those instances which are explanatory as well. I maintained the distinction between the two in (19) and (19’) only to emphasize the difference in strength between the different hypotheses.)

Again, there are many examples of γάρ utterances which are unambiguously subsidiary in my corpus:

(20) Ἐξαγαγέτω, φησὶ, τὰ ὕδατα ἑρπετὰ ψυχῶν ζωσῶν κατὰ γένος, καὶ πετεινὰ πετόμενα ἐπὶ τῆς γῆς κατὰ τὸ στερέωμα τοῦ οὐρανοῦ κατὰ γένος. Διὰ τί ἐξ ὑδάτων καὶ τοῖς πτηνοῖς τὴν γένεσιν ἔδωκεν; Ὅτι ὥσπερ συγγένειά τις ἐστὶ τοῖς πετομένοις πρὸς τὰ νηκτά. Καὶ γὰρ ὥσπερ οἱ ἰχθῦς τὸ ὕδωρ τέμνουσι, τῇ μὲν κινήσει τῶν περύγων εἰς τὸ πρόσω χωροῦντες, τῇ δὲ τοῦ οὐραίου μεταβολῇ τάς τε περιστροφὰς καὶ τὰς εὐθείας ὁρμὰς ἑαυτοῖς οἰακίζοντες· οὕτω καὶ ἐπὶ τῶν πτηνῶν ἐστὶν ἰδεῖν διανηχομένων τὸν ἀέρα τοῖς πτεροῖς κατὰ τὸν ὅμοιον τρόπον. (Bas. Hex. VIII.2.44-53)

“‘Let the waters bring forth,’ God says, abundantly moving creature that has life and fowl that may fly above the earth in the open firmament of heaven.’ Why do the waters give birth also to birds? Because there is, so to say, a family link between the creatures that fly and those that swim – just [*gar*] like fish cut the waters, using their fins to carry them forward and their tails to direct their movements round and round and straightforward, so we also see birds float in the air by the help of their wings too, in the same way.”

(21) Ὡς δὲ εἶπε ταῦτα, καὶ εἰπὼν ἔπεισεν, εὐπίστον γὰρ ἢ κουφότης, καὶ τοῦ Θεοῦ μάλιστα συνελαύνοντος, ἅπαντα ἦν ὁμοῦ τὰ δεινὰ. (Greg. Iul. II.677.37-39)

[The Persian guide who offered to lead Julian and his army into the heart of Persian territory (see example (57) in the δέ chapter), has just made his offer.] “And when he had said this, and gained credence to his story – credulous [*gar*] is relief, especially when God drives it on –, everything that was dreadful happened at once.”

(22) Ἡ μὲν δὲ νῆσος ὥδε ἐπυρπολεῖτο, τοὺς δὲ ἀμφὶ τὸν Θεαγένην καὶ τὸν Κνήμωνα, ἕως μὲν ἥλιος ἦν ὑπὲρ γῆν, τὸ κακὸν ἐλάνθανεν· ἡ γὰρ πυρὸς ὄψις ἀμαυροῦται δι’ ἡμέρας ὑπὸ τῶν ἀκτίνων τοῦ θεοῦ καταυγαζομένη. (Hel. Aeth. 2.1.1.1-4)

[The island to which Theagenes and Chariclea were taken by brigands, has been attacked. The brigands’ settlement has been put to the torch.] “The island was being ravaged thus by fire; but Theagenes and Cnemon, so long as the sun showed above the earth, did not observe the calamity – the aspect [*gar*] of fire is dimmed in the day time by the rays of the Sun-god shining brightly.”

In the first example, the utterance marked by γάρ provides information about how flying creatures are akin to water ones – but it could be argued that the important information here is that there is a family link between the two, and that the details

which fill in how this link should be understood, are subsidiary. (21) contains a γάρ which introduces an aside by Gregory, who remarks on the reason for how Julian could have been fooled by this Persian guide. Note that the γάρ utterance breaks up the ‘main line’ of the narrative – ἔπεισεν concludes the temporal subclause introduced by ὥς, while ἅπαντα marks the beginning of the apodosis which depends on the temporal subclause. In (22), finally, the γάρ segment provides information about why Theagenes and Cnemon weren’t aware of the fire destroying the brigands’ village. It could be said to amount to non-essential (or subsidiary) information in the sense that it does not advance the main storyline.

The problems associated with this type of analysis are quite obvious. First, this approach is almost entirely subjective. Many examples could be taken to be subsidiary if you wanted to look at them as such – and these same examples could be taken to be non-subsidiary if one were so inclined. Take the following instance:

(23) τῶν νεωκόρων τις διεκώλυέ τε καὶ ἀπέπεμπε, κατηφείας τὰ περὶ τὸ ἱερὸν ἐμπεπλησθαι φάσκων. Τὸν γὰρ δὴ προφήτην τὸν Καλάσιριν μακροῖς χρόνοις εἰς τὴν οἰκείαν ἐπανήκοντα ἐστιαθῆναι μὲν λαμπρῶς ἅμα τοῖς φιλτάτοις κατὰ τὴν ἐσπέραν καὶ πρὸς πᾶσαν ἄνεσιν καὶ ψυχαγωγίαν ἑαυτὸν ἐκδοῦναι· μετὰ δὲ τὴν εὐωχίαν σπεῖσαί τε καὶ πολλὰ ἐπεύξασθαι τῇ θεῷ. καὶ τοῖς παισὶν εἰπόντα ὥς ἄχρι τοῦ παρόντος ὄψονται τὸν πατέρα, καὶ πολλὰ ἐπισκήψαντα τῶν σὺν αὐτῷ νέων Ἑλλήνων ἀφιγμένων ὥς ἔνι μάλιστα προνοεῖν καὶ ἐν οἷς ἂν βουλομένοις αὐτοῖς γένηται τὰ δυνατὰ συμπράττειν, κατακλίναντά τε ἑαυτὸν καὶ εἴτε διὰ τὸ τῆς χαρᾶς μέγεθος τῶν πνευματικῶν πόρων εἰς ὑπερβολὴν ἀνεθέντων καὶ χαλασθέντων, οἷα δὴ γηραιοῦ τοῦ σώματος ἀθρόον διαφορηθέντος, εἴτε καὶ θεῶν αἰτήσαντι τοῦτο παρασχομένων, εἰς ἀλεκτρυόνων ὥδας τετελευτηκότα γνωσθῆναι, τῶν παίδων ἐξ ὧν προὔλεγεν ὁ πρεσβύτερος παννύχιον παρατηρούντων. (Hel. Aeth. 7.11.2.4-7.11.4.11)

[Cybele has gone to the temple of Isis to devote some offerings to the goddess there in name of Arsace. She is stopped by one of the priests:] “One of the sacristans objected and sent her away, declaring that the temple was now given up entirely to mourning. The prophet [gar] Calasiris, [he said], on returning to his residence after prolonged absence, had on that evening enjoyed a fine feast in company with his dearest ones, and had indulged in complete relaxation and geniality. At the end of the banquet he had offered up libations and a number of prayers to the goddess; he had then told his sons that only up to then would they be seeing their father, and he repeatedly adjured them to devote their best efforts to caring for the young Greeks who had arrived there with him [i.e., Theagenes and Chariclea, SZ], and to give them all possible assistance in whatever plans they might adopt. He retired to take his rest; then, whether it were that by the fullness of his joys the channels of respirations had been too greatly distended and slackened, and so his body, aged as it was, had suddenly broken down, or that the gods had granted him this end at his request, at cock-crow it was discovered that he was

dead, while his sons, based on what he had said, were keeping night-long watch over the old man.”

It could be argued that the information provided in the γάρ utterance is less central than the information provided previously – it is more important to note that Cybele cannot enter the temple than it is to describe the reason why. For the rest of the story, however, the extensive γάρ utterance presents crucial information – Calasiris, Theagenes’ and Chariclea’s guardian, has passed away, and this will give Arsace the excuse to provide shelter in her palace to Chariclea and especially Theagenes, with whom she is madly in love. This development will provide the basis for the next part of the story, in which Cybele’s son will become jealous of Theagenes’ preferred status with Arsace and angry because of his own cancelled marriage to Chariclea when it transpires that Theagenes is actually betrothed to her. As a result, Cybele’s son rides to Oroondates and informs him of his wife’s feelings for Theagenes – this will eventually lead to the final confrontation between Oroondates and Hydaspes. In that sense, then, the information in the γάρ utterance is highly important to the ‘main line’ of the narrative, and not subsidiary at all – although it is explanatory.

Other examples are even more unambiguously central to the development of the speaker’s argument or to the ‘main line’ of the narrative:

(24) Κατάμαθε πῶς τὰ τῆς γεωμετρίας εὐρέματα πάρεργά ἐστι τῆς σοφωτάτης μελίσσης. Ἐξάγωνοι γὰρ πᾶσαι καὶ ἰσόπλευροι τῶν κηρίων αἱ σύριγγες, οὐκ ἐπ’ εὐθείας ἀλλήλαις κατεπικείμεναι, ἵνα μὴ κάμνωσιν οἱ πυθμένες τοῖς διακένοις ἐφηρμοσμένοι· ἀλλ’ αἱ γωνίαι τῶν κάτωθεν ἑξαγώνων, βάθρον καὶ ἔρεισμα τῶν ὑπερκειμένων εἰσὶν, ὥς ἀσφαλῶς ὑπὲρ ἑαυτῶν μετεωρίζειν τὰ βάρη, καὶ ἰδιαζόντως ἐκάστη κοιλότητι τὸ ὑγρὸν ἐγκατέχεσθαι. (Bas. *Hex.* VIII.4.47-55)

[Basil is praising bees’ organizational skill and industriousness:] “Learn how the discoveries of geometry are byworks to the wise bee! Hexagonal [*gar*] are all the rows of honey-comb, with equal sides. They do not bear on each other in straight lines, lest the supports should press on empty spaces between and give way; but the angles of the lower hexagons serve as foundations and bases to those which rise above, so as to furnish a sure support to the lower mass, and so that each cell may securely keep the liquid honey.”

(25) Τὰ μὲν οὖν πρῶτα τῆς ἐγχειρήσεως αὐτῷ, καὶ λίαν νεανικὰ, καὶ πολλοῖς τῶν τὰ ἐκείνου φρονούντων περιβοώμενα ταῦτα. Τὴν γὰρ τῶν Ἀσσυρίων ὄσσην διαρρέων ὁ Εὐφράτης, καὶ τὴν Περσίδα παραμειβόμενος, ἐκεῖσε τῷ Τίγριδι μίγνυται, ταύτην ἑλὼν καὶ τεμὼν, καὶ τινὰ τῶν φρουρίων ἐξελὼν κατὰ πολλὴν τοῦ κωλύσοντος ἐρημίαν, εἴτ’ οὖν λαθὼν διὰ τὸ τῆς ἐφόδου τάχος, εἴτε ὑπὸ Περσῶν οὕτω στρατηγούμενος, καὶ κατὰ μικρὸν ὑπαγόμενος εἰς τοῦμπροσθεν [...]. (Greg. *Iul.* II.676.6-15)

[Gregory is recounting how Julian planned to bring paganism back to the Roman empire:] “Now, the first steps in his enterprise, excessively audacious and much celebrated by those of his own party, were as follows. The [*gar*] land of the Assyrians that the Euphrates flows through, and skirting Persia there unites itself with the Tigris; this he took and ravaged, and captured some of the fortified towns, in the total absence of anyone to hinder him, whether that he had taken the Persians unaware by the rapidity of his advance, or whether he was out-generalled by them and drawn on by degrees further and further into the snare, [...].”

(26) Ὡς δὴ καὶ τότε ὁ Κνήμων ἔφευγέ τε τὰ πάντων μᾶλλον αἰρετὰ καὶ φοβερὰ τὰ ἥδιστα ὑπελάμβανεν, ἦν γὰρ οὐ Θίσβη τὸ θρηνοῦν γύναιον ἀλλὰ Χαρίκλεια. Ἐγεγόνει δὲ τὰ περὶ αὐτὴν ὧδε· ἐπειδὴ γὰρ ὁ μὲν Θύαμις ἀλούς ἐζώγρητο καὶ εἶχετο αἰχμάλωτος ἡ δὲ νῆσος ἐνεπέπρηστο καὶ τῶν ἐνοίκων ἐκεκένωτο βουκόλων, ὁ μὲν Κνήμων καὶ Θέρμουθις ὁ τοῦ Θυάμιδος ὑπασπιστὴς ἑῷσι τὴν λίμνην διέπλευσαν ὃ τί ποτε τὸν λήσταρχον ἔδρασαν οἱ πολέμιοι κατασκοπήσοντες· ἔσχε τε τὰ κατ’ αὐτοὺς ὡς δὴ καὶ εἴρηται. [...] (Hel. Aeth. 5.4.2.1-5.4.3.7)

[Cnemon thinks he heard Thisbe through a door. He is shocked – he was quite convinced she was dead.] “And so on this occasion as well Cnemon shrank from that which he preferred to all the world, and viewed with terror what gave him most delight. For the wailing woman was not Thisbe, but Chariclea. What had happened to her was this. When [*gar*] Thyamis had been captured alive and was held as a prisoner, and the island had been set ablaze and had been evacuated by its herdsmen inhabitants, Cnemon and Thermouthis, the henchman of Thyamis, crossed over the lagoon at dawn to discover in what way the enemy had dealt with the brigand chief. How it fared with them has already been told. [...]”

(27) ταῦτά μου καὶ τὰ τοιαῦτα διεξιόντος ὁ ἱερεὺς τοῦ Πυθίου γνώριμος ἐμοὶ γεγονὼς ἐς τὰ μάλιστα, Χαρικλῆς ὄνομα ἦν αὐτῷ, «θαυμασίως» ἔφη «λέγεις· καὶ ταύτη τὴν γνώμην τίθεμαι καὶ αὐτός, οὕτω καὶ παρὰ τῶν ἐν Καταδούποις ἱερέων τοῦ Νείλου πυθόμενος.» Κἀγὼ πρὸς αὐτὸν «ὦ Χαρίκλεις» ἔφην «ἦλθες γὰρ κάκεῖσε;» «ἦλθον» εἶπεν «ὦ σοφὲ Καλάσιρι.» (Hel. Aeth. 2.29.1.1-7)

[Calasiris is telling Cnemon about how he met Charicles. Charicles was impressed at Calasiris’ knowledge of the Nile’s characteristics:] “While I was expounding these and other such matters, the priest of the Pythian god, with whom I had become very familiar, and whose name was Charicles, said to me: ‘A most excellent statement, with which I am myself in agreement; for I have had the same information from the priests at Catadoupa on the Nile.’ ‘Charicles’, I said to him, ‘you have been [*gar*] there as well?’ ‘I have’, he said, ‘learned Calasiris’.”

In (24), the imperative *κατάμαθε* points forward to the *γάρ* utterance, which will enable the hearer to learn how bees are aware of geometry. Without the *γάρ* utterance, in other words, Basil's command would not make much sense – the *γάρ* segment provides an answer to the indirect question introduced by *πῶς* ('how') in the preceding utterance. As such, *γάρ* marks essential information – without the information it marks, Basil's audience would not be able to learn how the bees are intuitively aware of 'the discoveries of geometry' (*τὰ τῆς γεωμετρίας εὐρέματα*), and the command introduced by *κατάμαθε* would be left hanging without an object to apply to. In (25), the *γάρ* utterance fills in the cataphoric *ταῦτα* of the preceding utterance – the first steps (*τὰ πρῶτα*) of Julian's undertaking (*τῆς ἐγχειρήσεως*) are topicalized in this preceding utterance, but only become concrete in the *γάρ* utterance. Note that this utterance continues after (25) – I have cut it off here for reasons of space (as I have done for example (26)). The *γάρ* segment, then, is an extensive one, which recounts how Julian took the first steps in bringing paganism back to his empire. Given the fact that the *ταῦτα* points forward, it would be more appropriate to argue that the utterance preceding *γάρ* is subsidiary to the *γάρ* utterance.¹¹

The same is true for (26), where *ᾧδε* is cataphoric as well – the utterance preceding *γάρ* announces the information to be presented in the *γάρ* utterance (*ἐγγέγονει δὲ τὰ περὶ αὐτὴν ᾧδε*, or 'the things connected to her had happened as follows'). As such, the *γάρ* utterance is more crucial to the 'main line' of the narrative than the one preceding it.¹² (27), finally, is somewhat different. In this example, we get a dialogue – Charicles informs Calasiris of the fact that he conversed with the priests at Catadoupa, and Calasiris reacts with a question which takes that information as input. The important point here, however, is that Calasiris' turn in the dialogue consists exclusively of a vocative and a *γάρ* utterance. If *γάρ* introduces a subsidiary utterance, to what is it subsidiary? Charicles' utterance? If that is the case, then we would expect a transition to a more important point in Calasiris' subsequent utterance, but we get no such thing – instead, Calasiris asks Charicles what his purpose was in going to Catadoupa (*Τί δέ σε χρέος ἦγαγε;* or 'what need drove you there?'). In other words, Calasiris doubles down on his 'subsidiary' utterance, which raises yet more questions as to how we should construe *γάρ*'s subsidiarity.¹³

The subsidiarity hypothesis still seems to be too strong to account for all instances of *γάρ*. As such, the hypothesis would need to be weakened even more. The danger here is

¹¹ See Moeschler (1993: 166) for similar points related to *parce que* in French.

¹² Note also the first *γάρ* in (26), which identifies the wailing woman as being not Thisbe, but Chariclea – a crucial piece of information, which cannot be subsidiary at all either.

¹³ For other clearly non-subsidiary examples, see e.g. Bas. *Hex.* VI.3.31, VIII.1.21, VIII.7.35; Greg. *Iul.* I.632.10, II.677.14, II.689.2; Hel. *Aeth.* 1.18.5.4, 2.8.4.1 and 8.11.4.2.

that the account becomes too weak – that it becomes so general that it would not set off the contexts in which γάρ occurs from the contexts in which it cannot occur, and that it loses its explanatory potential. In the same vein, there are other DMs which seem to be able to mark subsidiary utterances – as I pointed out in the previous chapter, where δέ marked what would be termed ‘elaborations’ on the definition adopted in this chapter in (34) and (35). Intriguingly, however, the subsidiarity hypothesis might not be too far off the mark – of Mann et al.’s (1989: 48) set of subsidiary coherence relations, only Concession can unequivocally *not* be marked by γάρ (see also Hovy & Maier 1995: 14).¹⁴ While the notion of subsidiarity seems to be relevant for a semantic analysis of γάρ (as the notion of ‘elaboration’ is), then, it does not suffice to account for all instances of γάρ.

Consequently, there are two possible paths we can take here. One is that we should abandon the idea of a unitary analysis, and distinguish between those instances of γάρ which mark subsidiary (and/or elaborative) instances and those which mark something else (possibly with further subdivisions). The other is that we should look at γάρ from a different angle, keeping in mind that many instances are indeed elaborative and/or subsidiary. On this second route, we would keep working towards a unitary account – one which takes into account the diverse contexts in which γάρ can occur without losing sight of the fact that not all of these can be considered to be elaborative and/or subsidiary. This second approach would acknowledge that the elaboration and subsidiarity hypotheses are not too far removed from γάρ’s core meaning. Needless to say that, following Grice’s Modified Occam’s Razor, I would much prefer this second account. As such, my goal in the following section is not to start from scratch in crafting an analysis of γάρ’s semantics, but to (a) sharpen existing accounts of γάρ; and (b) describe them in more cognitively acceptable terms. As to (a), I will look at contexts where γάρ occurs but which are not easily subsumed under either the elaboration and/or subsidiarity hypotheses. Some of these have, to my knowledge, never been discussed in any analysis of γάρ. By considering these examples, we will get a sense of what the elaboration and subsidiarity hypotheses lack – and this will help us improve them to be as wide-ranging as possible. The aim is to craft an account which is as broadly applicable as possible without sacrificing anything in the way of semantic parsimony.

As to (b), the ill-defined notions of ‘elaboration’ and ‘subsidiarity’ will have to be recast in cognitively acceptable, relevance-theoretic terms – as stated, the goal is to build an analysis of γάρ’s meaning which can deal with as many instances as possible, not just the non-elaborative and/or non-subsidiary ones. This analysis will revolve

¹⁴ As always, it is next to impossible to assess negative evidence for Ancient Greek – hence, when I say that γάρ can ‘unequivocally’ not mark Concessions, I mean that I have not come across any examples in my corpus.

around the relevance-theoretic conception of contextual assumptions – I will argue that γάρ indicates that the upcoming assumption provides contextual anchoring for the previous one.

4.2.2 Procedurality

In the previous chapter, I argued that δέ should be considered procedural. My argument focused on the trouble many analysts encountered with translating or otherwise pinning down its meaning (i.e., its introspective inaccessibility). The same is true for γάρ: even though it can often be translated with *for*, it is not at all clear (a) that *for* is not procedural itself; and (b) that this translation fits every instance. In some examples, the most natural translation for γάρ seems to be to not translate it at all, or to represent it via punctuation (which, as we have seen, is procedural as well (Bar-Aba 2003)) – see (25) and (26) for examples. (28) is not easily translated either:

(28) “Ἐν μόνον αἰτῶ καὶ δὸς ᾧ Θύαμι• συγχώρησον εἰς ἄστυ με πρότερον ἐλθοῦσαν, ἢ ἔνθα βωμὸς ἢ ναὸς Ἀπόλλωνι νενόμισται, τὴν ἱερωσύνην καὶ τὰ ταύτης ἀποθέσθαι σύμβολα. Βέλτιον μὲν γὰρ εἰς Μέμφιν, ὅταν καὶ τὴν τιμὴν ἀνακτήσῃ τῆς προφητείας· οὕτως ἂν ὁ γάμος εὐθυμότερον ἄγοιτο νίκη συναπτόμενος καὶ ἐπὶ κατορθουμένοις τελούμενος· εἰ δὲ καὶ πρότερον, ἐν σοὶ καταλείπω τὴν σκέψιν· μόνον τελεσθεῖν μοι τὰ πάτρια πρότερον. (Hel. Aeth. 1.22.6.6-1.22.7.5)

[Chariclea is trying to delay her proposed marriage to Thyamis:] “But one thing I crave at thy hand – and give it to me, Thyamis. Suffer me first to go to a city, or any place where is an altar or temple sacred to Apollo, to surrender my priesthood and the tokens thereof. It would be better [*gar*] to do this at Memphis, when you have also recovered the honour of your priesthood; for so it should come to pass that marriage joined with victory and accomplished successfully shall be much more merry. But whether this must be done before, I leave to your discretion; only let the rites of my country be completed before.”

‘For’ doesn’t really fit here, but it is not clear that *any* translation would fit – it maybe makes the most sense to just leave γάρ out in English. Examples like this indicate that there is no one-to-one correspondence between γάρ and an equivalent in English (whether that be *for* or something else). The LSJ dictionary proposes *for* as the basic translation for γάρ, but it is telling that it first indicates what its main function is (according to the compilers of the dictionary at least) – “introducing the reason or cause of what precedes”. As with δέ, the entry on γάρ is mainly concerned with outlining the contexts in which γάρ appears instead of its meaning – according to the LSJ, it is used “in simple explanations”, “to introduce a detailed description or narration already

alluded to”, “to confirm or strengthen something said”, and so on. This is the same approach Denniston (1954²) and Misener (1904) take, as we have seen, and it is testament to the fact that scholars have found it extremely difficult to describe γάρ’s meaning (see also De Jong 1997; Bakker 2009). All of this seems to point in the direction of introspective inaccessibility and, hence, procedurality.

As to non-compositionality, it is clear that γάρ, like δέ, cannot occur with conceptual items in the way *but* can (see example (52) in §2.3.2.2 – ‘but, and this is a big but...’). However, like δέ, γάρ *can* co-occur with other DMs:

(29) Μᾶλλον δὲ τοῦ στρατιωτικοῦ μέρος οὐκ ἐλάχιστον, καὶ ὅσον εὗρε σαθρὸν καὶ νοσῶδες, τοῦ καιροῦ δοῦλον καὶ τότε καὶ πρότερον· οὗ τὸ μὲν δεδούλωτο, τὸ δὲ ἥλπιδεν. Οὐ γὰρ δὴ τὸ πᾶν ὑφείλεν, οὐδὲ τοσοῦτον ἔδωκεν αὐτῷ καθ’ ἡμῶν ὁ δι’ ἐκείνου διώκτης. (Greg. *Iul.* I.585.40-45)

[Gregory is telling how Julian cleaned house among the imperial household; he also tries to get the army on his side:] “And still more than not the least part of the army, did he make his own all that portion which he found already corrupt and unsound – time-servers then as they had been before, of whom he had enslaved one half and hoped to do the other. He had not [*gar dē*] seduced the whole body, neither had he who persecuted through his agency, given him so much strength against us.”

There is no reason to suppose that γάρ and δὴ perform anything else than their usual function here. The γάρ utterance makes explicit an implicit premise of the preceding utterance – if Julian hoped (ἥλπιδεν) to convince part of the ‘time-servers’ (τοῦ καιροῦ δοῦλον), it follows that he had not seduced all of them. Conversely, δὴ usually indicates that the information contained in the utterance is “self-evident” (Van Ophuijsen 1993: 145), and it does so here as well – if he hoped to get some (τὸ δέ) of the ‘time-servers’ on his side, it is pretty obvious that Julian had not gotten all the ‘time-servers’ on his side.

(30) Συλλαβόντες οὖν ἦγον ἐπὶ τὸν ἄρχοντα λίαν ἐσπουδακότες λαφύρων τὸ κάλλιστον πρῶτοι προσαγαγεῖν· ἔμελλον δὲ ἄρα καὶ μόνον προσφέρειν, ἄλλω γὰρ οὐδενὶ τῶν ἄλλων οὐδεὶς ἐπετύγχανεν ἐκ περάτων καὶ ταῦτα εἰς πέρατα τὴν νῆσον ἐπιδραμόντες καὶ ὥς ἄρकुσι τοῖς ὅπλοις πανταχόθεν πᾶσαν περιβαλόντες. Ἡ μὲν γὰρ ἄλλη πυρὶ πρὸς τοῦ προτέρου πολέμου κατηνάλωτο· μόνον δὲ λειπόμενον τὸ σπήλαιον ἠγνοεῖτο. (Hel. *Aeth.* 5.8.1.1-5.8.1.8)

[The bandits who had attacked the camp of Thyamis and his brigands, have captured Theagenes and Chariclea:] “So they seized hold of the pair and led them before their commander, full of eagerness to be the first to bring in the finest piece of plunder. But in fact this was the only piece that they were to bring, as not a man of them found anything else about the place, although they scoured the island from end to end, sweeping it thoroughly in every direction – as with a drag-net which they threw around

in every direction. The rest [*men gar*] had been altogether devastated by fire that arose in the previous fighting; only [*de*] the cavern remained, of which they remained unaware.”

Here, γάρ co-occurs with μέν. Again, there is no evidence to indicate that either or both of these DMs function differently here than they do on their own – γάρ could be taken to mark an elaborative utterance which explains why the bandits didn’t find anything of value; μέν forms a correlative pair with δέ, contrasting the rest of the island (ἡ ἄλλη) – where everything was destroyed – with the cavern (τὸ σπήλαιον) – where something could be found, although it was left undiscovered.

There is one other collocation which should be mentioned here – γάρ can also co-occur with οὖν. According to Bakker (2009), this combination is compositional – she argues that “the function of γάρ οὖν in utterances introduced by these particles cannot be simply the sum of the respective functions of γάρ and οὖν” (2009: 58). I will discuss her position in the chapter on οὖν, as my argument will have to involve the meaning of both γάρ and οὖν (§5.2.6). A not-overly-surprising sneak peek: I will argue that γάρ οὖν examples are non-compositional, and that any attempt at a compositional analysis is due to a misguided attempt to salvage the standard coherence approach, which precludes γάρ and οὖν from co-occurring – on this approach, γάρ points to a transition from a central to a subsidiary discourse segment, while οὖν does the opposite (*ibid.*; see also e.g. Sicking 1993: 48).

Rigidity and non-polysemy, the other two traits associated with procedurality, are, as with δέ, more challenging to assess. In the δέ chapter, I noted that the former relies heavily on native speaker intuition, while the latter is more a matter of the methodological perspective one takes than any falsifiable feature inherent in the linguistic item under consideration (§3.2.2). However, γάρ’s non-compositionality and introspective inaccessibility in particular (since its non-compositionality is still in doubt until we get to the γάρ οὖν collocation) point in the direction of a procedural analysis.

4.2.3 Γάρ in the wild: a journey through its different contexts

In this section, I will discuss several contexts in which γάρ occurs and which cannot be subsumed under either of the three hypotheses outlined above (§4.2.3.1, §4.2.3.2, §4.2.3.5 and §4.2.3.6). I’ll also deal with several contexts which can be subsumed under the elaboration hypothesis (see Figure 4.1), but which have not yet been described in much detail (Exemplifications in §4.2.3.3; Reformulations in §4.2.3.4). In §4.2.4, a procedural rule for γάρ will be proposed which ties together the observations made in the previous section – instances of ‘elaborative γάρ’ will be recast in the same

cognitively realistic terms as instances of ‘non-elaborative γάρ’, and γάρ will be taken to encode the same procedure in all instances.

4.2.3.1 Implicit premises

The first type of context in which γάρ occurs and which I want to discuss here, has already been mentioned (see e.g. (8) *supra*). Γάρ can mark implicit premises of preceding utterances which are made explicit (I will call them ‘implicit premises’ all the same in the rest of this discussion). These can be quite close to Explanations, but should be distinguished all the same.

(31) Τίς ὁ τοῖς γυψὶ προαπαγγέλλων τῶν ἀνθρώπων τὸν θάνατον, ὅταν κατ’ ἀλλήλων ἐπιστρατεύσωσιν; Ἰδοὺς γὰρ ἂν μυρίας ἀγέλας γυπῶν τοῖς στρατοπέδοις παρεπομένας, ἐκ τῆς τῶν ὅπλων παρασκευῆς τεκμαιρομένων τὴν ἔκβασιν. (Bas. Hex. VIII.7.50-3)

[Basil is giving examples of how God has blessed winged creatures with everything they need to survive.] “Who announces beforehand to the vultures the carnage of men, when they march in battle array against one another? You may see [*gar*] myriad flocks of vultures following army camps and calculating the outcome of warlike preparations.”

In this example, the utterance preceding γάρ makes reference to vultures, who are aware of the slaughter associated with battles before they even happen – the question asks, rhetorically, who announces to the vultures beforehand (προαπαγγέλλων) the death of men (τῶν ἀνθρώπων τὸν θάνατον), when they march against each other (ὅταν κατ’ ἀλλήλων ἐπιστρατεύσωσιν). The γάρ utterance communicates an implicit premise of the rhetorical question – vultures need to be following armies before they can be considered to have a preternatural ability to determine where the carnage of war will happen. Note that the line between implicit premise and Explanation is finely drawn here – the γάρ utterance could also be taken to provide a speech-act causal assumption which explains why Basil asks who announces to vultures beforehand that a slaughter of men will occur.

(32) νῦν δὲ ὁ μὲν, ὅπερ εἶπον, ἐνὸς ἦν τοῦ διασώσασθαι τὸν στρατὸν, καὶ τὰ νεῦρα Ῥωμαίοις ὑπολιπεῖν· νεῦρα γὰρ ἦσαν, καὶ εἰ κακῶς ἔπραξαν ἀβουλία μᾶλλον τοῦ στρατηγήσαντος ἢ σφῶν αὐτῶν ἀνανδρία. (Greg. Iul. II.684.1-5)

[Julian has died during his campaign against the Persians, but the army is still stranded in enemy territory. Jovian is chosen as his successor.] “In the present case, he [i.e., Jovian, SZ] had, as I have said, but one object in view – to save his army and preserve the sinews of the Roman power – sinews [*gar*] they were –, and if they failed, it would be more through the imprudence of him that commanded than their own cowardice.”

The line with epistemic causality is easier to draw here. If Jovian aimed to preserve the sinews (νεῦρα) of the empire, then those sinews had to have been sinews. The relevance of the γάρ utterance lies in its pragmatics – the focus is on the νεῦρα, emphasizing the importance of the Roman military and conveying the implicature that (mixing two corporeal metaphors here) they are the lifeblood of the empire.

(33) Συνεργοῦ δὲ αὐτῷ πρὸς τὴν ἐναγῇ ταύτην πράξιν ψευδοπροφήτου τινὸς Μεμφίτου γεγονότος, ἐπειδὴ κατὰ τὴν Θετταλίαν μεταθέων καὶ παρὰ Οἰταίων ὄντων αὐτοῦ πολιτῶν ἐξαιτῶν οὐδαμῶς ἠῦρισκον, ἔκδοτον ἐκείνων τουτονὶ καὶ εἰς σφαγὴν, ὅπου ποτὲ ἂν εὐρίσκηται, ὡς ἀλάστορα παραχωρησάντων, ὀρμητήριον εἶναι τῆς φυγῆς τὴν Καλασίριδος Μέμφιν εἰκάσας εἷς τε ταύτην ἀφικόμενος, καὶ τὸν μὲν Καλάσιριν, ὡς ἐχρῆν, τεθνηκότα καταλαβὼν, παρὰ Θυάμιδος δὲ τοῦ ἐκείνου παιδὸς ἅπαντα τὰ περὶ τὴν θυγατέρα ἐκδιδασχθεὶς, τὰ τε ἄλλα καὶ ὅτι πρὸς Ὀροονδάτην εἰς τὴν Σύνην ἐξαπέσταλτο, καὶ τοῦ μὲν Ὀροονδάτου κατὰ τὴν Σύνην ἀποτυχῶν (ἦλθον γὰρ κἀκεῖσε), κατὰ δὲ τὴν Ἐλεφαντίνην ὑπὸ τοῦ πολέμου καταληφθεὶς. (Hel. Aeth. 10.36.4.1-10.36.5.3)

[Charicles tells the story of how he went after Chariclea and Theagenes, after Theagenes had ‘abducted’ Chariclea from Delphi:] “A false priest of Memphis was his companion in doing this heinous deed. After I had been to Thessaly and demanded this fellow from the people of Oeta, I didn’t find him – but the Oetians were all content that he should be slain wherever he was as a scourge. I went on to Memphis, which I deemed to be a starting place for Calasiris’ flight. When I came there I found him dead, as well he had deserved, and was told by his son Thyamis of all that had happened to my daughter – among other things, also how she had been sent to Syene to Oroondates. I missed Oroondates at Syene – I went [*gar*] there as well – and was caught by the warfare at Elephantine.”

In this last example, the γάρ utterance also obviously functions as an implicit premise.¹⁵ The γάρ utterance makes explicit an assumption which has to be true in order for the preceding assumption to hold true – for Charicles to have not found Oroondates at Syene, he must have gone there. However, this information had not yet been divulged, and so Charicles adds it in an aside so as to avoid any misunderstandings. Here, there is no sense in which the γάρ utterance could be considered to be explanatory – it is clearly presuppositional.¹⁶

¹⁵ See also Bas. Hex. VI.11.48 and V.6.55 (though the latter could also be considered explanatory); Greg. Iul. I.585.5; Hel. Aeth. 10.35.1.4, 2.16.5.2, 7.26.9.1, also (9) *supra*.

¹⁶ On a relevance-theoretic account, presuppositions are reanalyzed as a special type of implicatures (De Saussure 2013: 180) – they can be considered to be implicit premises. See Kalokerinos (2004: 49) on Modern Greek *jati*, which can mark presuppositions which are very similar to the ones γάρ marks here.

Γάρ also marks implicit premises in dialogue, where the hearer reacts to something his interlocutor said as to make sure that he derived a speaker-intended implicature (that is, implicit premise) of the preceding utterance:

(34) Πρὸς ταῦτα διαταραχθεὶς ὁ Χαρικλῆς ὑπεξήκει τε τοῦ θαλάμου σὺν ἡμῖν ἡσυχίαν ταῖς θεραπαίναις ἐπιτάξας, προελθὼν τε τῆς οἰκίας «τί ἄρα τοῦτο» ἔλεγεν «ῶ ἴαθ' Ἐκαλάσιρι; τίς ἢ προσπεσοῦσα τῷ θυγατρὶ μάλακία;» «Μὴ θαύμαζε» εἶπον «εἰ τοσούτοις ἐμπομπεύσασα δῆμοις ὀφθαλμόν τινα βάσκανον ἐπεσπάσατο.» Γελάσας οὖν εἰρωνικὸν «καὶ σὺ γάρ» εἶπεν «ὥς ὁ πολὺς ὄχλος εἶναί τινα βασκανίαν ἐπίστευσας;» (Hel. Aeth. 3.7.2.1-8)

[Chariclea has fallen sick; Charicles has asked Calasiris to come take a look at what might be wrong with her.] “(When we came where she was and had gone into her chamber, we found her sick on her bed, quite distraught, and all her eyes bedewed with love drops. After she had embraced her father, as her manner was, he asked her what she ailed. She made him answer that her head did ache, and that she would fain sleep if she might.) Charicles, much grieved at this, went out of her chamber with me, and commanded the maids to keep quiet, and when he came before his own house he said: ‘What should this mean, good Calasiris? What disease does my dear daughter have? ‘Marvel not,’ said I, ‘if she, having shewn herself in such a company, has been spied by some spiteful eye.’ He smiled at this jestingly and said: ‘You too [*gar*], like the masses, believe in witchcraft.’”

This example is very similar to (27). There, Charicles talked about how he had received information from the priests at Catadoupa; Calasiris then asked him, in the utterance marked by γάρ, whether he had been to Catadoupa. Calasiris wanted to make sure he had understood the implicature of Charicles’ utterance correctly – he had derived the implicit premise that Charicles had been to Catadoupa, but it could have also been the case, of course, that Charicles had heard this information from someone else. In (34), Calasiris has just stated that he thinks someone has put the evil eye on Chariclea; Charicles reacts with an utterance marked by γάρ, in which he asks whether Calasiris believes in witchcraft (βασκανίαν), like so many others (ὥς ὁ πολὺς ὄχλος). Again, the γάρ utterance asks for confirmation that the hearer has derived a speaker-intended implicature (implicit premise) – namely, that Calasiris believes in witchcraft, a necessary prerequisite of his assumption that someone has put the evil eye on Chariclea. In other words, Charicles assumes that Calasiris can only believe that the evil eye is on

Chariclea if he also believes in witchcraft – and he makes this assumption mutually manifest in an utterance marked by γάρ.¹⁷

From a coherence point of view, it is not clear which coherence relation would correspond to an implicit premise. An Elaboration (in the narrow sense) doesn't really fit – while (31) could be described as such (or, as stated, as an Explanation), examples like (32) and (33) do not provide any 'additional detail' except in the most trivial sense – they are very different from instances like (14) or (16), where the speaker clarified how 'relative meaning' (14) or the preceding question (16) should be understood. The γάρ utterances in (32) and (33) *can* be considered to be subsidiary, but this doesn't really help us either. A subsidiary utterance must be relevant in some way – a way which needs to be specified under a coherence account. But it's not clear to me how coherence accounts would construe this relevance without having recourse to coherence relations. Yet if these γάρ utterances are relevant because they are marked by a certain coherence relation, we're back to square one. The bottom line is that some implicit premises, like the ones marked by γάρ in (32) and (33), cannot be subsumed comfortably under any decently defined coherence relation – the Elaboration label doesn't really fit; if the Elaboration label doesn't fit, the Reformulation/Exemplification/Explanation label also doesn't fit, and so it wouldn't be an example of an elaboration; and if it isn't an elaboration, it's not really clear which coherence relation *does* apply.

From an RT point of view, these examples can be regarded in the same light as those instances which are more easily subsumed under a coherence framework. As I will argue in §4.2.4, examples such as (32) and (33) contribute to the overall relevance of the text by providing valuable contextual assumptions, which moor the previous assumption(s) to a different set of contextual assumptions so as to make sure the hearer understands (or believes) the former. This sort of contribution can often be analyzed under a coherence framework – the γάρ utterance often provides an Explanation, for instance. Other instances can be more challenging to approach in that fashion – the speaker is not restricted by a menu of coherence relations in providing contextual anchoring for

¹⁷ It should be noted here that premises, implicit or not, should be distinguished from Explanations. A premise is a necessary condition but not necessarily a sufficient condition – in (37), for instance, the implicit premise that Calasiris believes in witchcraft does not explain why he thinks that Chariclea has fallen under the spell of the evil eye. It just explains why Calasiris would come up the explanation that Chariclea has fallen under the spell of the evil eye in the first place – in other words, it explains why Calasiris would search for an explanation in that direction, not why he thinks that explanation holds true (see Sperber & Wilson (1995²: 12–13), who state that inferential conclusions must be “at least warranted by the premises”). Contrast the γάρ utterance here with the γάρ utterance in e.g. (6), where it fully explains why the speaker thinks the previous proposition is true – in ‘the heavens were not crowned by the sun, moon and stars; these bodies were not yet created’, the second assumption explains why the speaker thinks the first one holds. As such, ‘premise’ is a much broader notion than ‘Explanation’.

another utterance. In other words, γάρ utterances can provide contextual assumptions in many different ways – including but not restricted to ways which can be analyzed adequately under a coherence-based framework. (32) and (33) contribute contextual assumptions for understanding another utterance, but do not do so under any of the coherence relations commonly proposed. Metadiscursive comments, which can also be marked by γάρ, are quite similar.

4.2.3.2 Metadiscursive comments

This type of utterance occurs mostly in Gregory’s invectives – there is one instance of metadiscursivity with γάρ in Heliodorus (36), and none in the *Hexaemeron*. All of these utterances are non-explanatory, and some of these are metalinguistic in Blakemore’s (2007) sense, as outlined in the previous chapter on δέ (§3.2.3.3):

(35) [...] λίνοις τὰ ὦτα διετέμνετο, καὶ τούτων τοῖς στερροτάτοις καὶ λεπτοτάτοις· σαργάνῃ πρὸς ὕψος αἰρόμενος, μέλιτι καὶ γάρῳ διάβροχος, σφηξὶ καὶ μελίσσαις ἐξαίνετο μεσοῦσης ἡμέρας, ἡλίου τὸ φλογῶδες ἐλλάμποντος· καὶ τοῦ μὲν τὰς σάρκας ἐκτῆκοντος, τοῖς δὲ θερμότεραν ποιοῦντος τὴν βρῶσιν τῶν μακαρίων ἐκείνων σαρκῶν, οὐ γὰρ ἀθλίῳν ἂν εἴποιμι. (Greg. *Iul.* I.620.19-26)

[Gregory tells the story of how Marcus, bishop of Arethusa, was tortured by a mob of pagans:] “[...] he had his ears cut through with twine – with the sharpest and thinnest sort. Hoisted on high in a hamper, smeared over with honey and pickle, he was lacerated by bees and wasps at noon-day, when the sun was darting its flames, and melting away the flesh of the victim, and making his assailants [i.e., the bees and wasps, SZ] get more fierce in the devouring of that blessed flesh – not [*gar*] could I call it wretched.”

There is no Explanation here – not on an epistemic level (the γάρ utterance does not explain how Gregory knows the bees and the wasps attacked Marcus), and not on a speech-act level (the γάρ utterance does not explain why Gregory says that the bees and wasps attacked him). Even looking at this example metadiscursively, there are no grounds to consider the γάρ utterance to be explanatory – it does not explain why Gregory used the term ‘blessed’ (μακαρίων) to refer to Marcus’ flesh. Instead, the γάρ utterance functions metalinguistically by offering Gregory’s perspective on the use of μακαρίων. This is a curious way of referring to Marcus’ flesh, which was being lacerated (ἐξαίνετο) and ‘melting away’ (ἐκτῆκοντος) – indeed, most people would regard it as being ‘wretched’ (ἀθλίῳν). Gregory is aware of this, and, as such, feels that his estimation of the flesh as ‘blessed’ is in need of some type of comment – and he marks this comment with γάρ. Note that there is mindreading going on here – Gregory assumes that his audience will probably be confused by his labeling Marcus’ flesh as being ‘blessed’. By adding the γάρ utterance, he makes clear that he is aware that

Marcus' flesh could be called 'wretched', but that he has made a conscious choice to refer to it with the 'blessed' designation. By doing so, he conveys the implicature that suffering in God's name is something beautiful – even though most people would see the type of torture Marcus has undergone as being something 'wretched'. Without the addition of the γάρ utterance, this implicature could still be derived, of course. But by explicitly cutting off the implicature that Marcus' suffering was something terrible in the γάρ utterance, the γάρ utterance emphasizes that it was blessed by God, and the speaker-intended implicature that suffering in God's name is something beautiful becomes easier to derive.

For all of this, the γάρ utterance is still not explanatory. In fact, similarly to (32) and (33), it is not clear which coherence relation holds here. It is not a Reformulation or an Exemplification; nor is it explanatory. Does it provide additional detail as an Elaboration? Compare (35) to examples like (14) and (16), which, we saw, would also provide additional detail (see e.g. Mann & Thompson (1986a: 273) and Hobbs (1985: 18-20)). In (35), the γάρ utterance does not 'unpack' a preceding entity in the way it does in (14) and (16); rather, it is a metadiscursive comment on the speaker's use of a certain word. In addition, examples like (32) and (33) would *also* have to be shoehorned into the same space as e.g. (14) and (35). It's getting pretty crowded in that space – it would take a lot of definitional gymnastics to subsume (35) under the same heading we use for (14) or (16) – not to mention (32) and (33). As such, Elaboration does not seem to be adequately defined as a separate relation – it amounts to a wastebasket category, encompassing those instances which are felt to be somehow subsidiary but which do not fit under any other coherence relation.

The γάρ utterance could alternatively be regarded as 'Background'. 'Background' – referring to those utterances which provides a "background" for the events described (Hobbs 1985: 13) – could be equated with 'Elaboration'. Both should be taken as a subordinate relation under the heading of elaboration so as to maintain a unitary account – 'Background' would then replace 'Elaboration' in the elaboration ecology. One reason for doing this might be that Background is better described in the secondary literature than Elaboration. However, this is not the case – in fact, very few coherence theorists include a Background relation in their taxonomies.¹⁸ At the same time, those few approaches in which it is included seem to regard 'Background' as a wastebasket category in the same way as Elaboration in the narrow sense is – 'additional detail' and 'background', two notions which are key to these relations, are never cashed out

¹⁸ See De Jong (1997: 184), who argues that γάρ's main function can sometimes lie in introducing "background information".

theoretically.¹⁹ In other words, both Elaboration and Background are defined negatively as those instances which remain when the more obvious ones have been assigned to other relations. Unless Elaboration and Background can be redefined in a more positive way, analyzing γάρ as indicating an Elaboration or Background is equal to admitting that you don't really know what γάρ is doing here. These types of mystifying γάρ's exist for every kind of analysis (including my own), but it is not productive to respond to their challenge by postulating the existence of yet another, ill-defined coherence relation which γάρ would also be able to mark.

In sum, I see no plausible path for analyzing (35) as an example of an elaboration. But it is also not clear to me which coherence relation *would* apply to it. This will be a recurring theme in these sections. Γάρ, by the very contexts in which it occurs, resists a coherence-based analysis of its meaning – that is, it can be used in contexts which are not easily defined in terms of *any* coherence relation.

(36) Σὺ δὲ ὦ θύγατερ (πρῶτα γάρ σε καὶ ὕστατα τὸ ποθητὸν ὄνομα τοῦτο προσφθέγγομαι), [...]. (Hel. Aeth. 10.16.9.1-3)

[Hydaspes still wants to sacrifice Chariclea, although he has by now accepted that she is his daughter:] “As for you, my daughter – for the first [*gar*] and last time I call you by that longed-for name –, [...].”

(36) is very similar to (35). The γάρ utterance is again metalinguistic, with Hydaspes considering the poignancy of his using the term ‘daughter’ to refer to Chariclea. Note that, as in (35), the γάρ utterance is not explanatory – it does not explain why Hydaspes uses the term ‘daughter’ here, but amounts to a reflection on his use of that term. It might be considered to provide additional detail about the speaker’s use of the word ‘daughter’. However, it is, like (35), very different from an example like (14) or (16), which also provide additional detail – as well as (32) and (33), which would provide ‘additional detail’ in yet another sense. If (14), (16), (35) and (36) – as well as (32) and (33) – all provide ‘additional detail’, then every subsidiary utterance provides ‘additional detail’ in some sense, and the notion would cease to have any practical value. If we want

¹⁹ In Hobbs’ model (1985: 13), it is not defined – he just states that, with a Background relation, “some entity is placed or moves against that system [i.e., “a system of entities and relations”, SZ] as a background”. This amounts to begging the question. Under RST, a Background is used to refer to discourse segments without which the audience “won’t comprehend” the central discourse segment “sufficiently” (Mann et al. 1989: 51). However, ‘sufficiently’ is never cashed out – the utterance preceding the γάρ utterance in e.g. (37) *infra* would be perfectly understandable without the γάρ utterance, but it would not achieve the same positive cognitive effects (i.e., it would not be recognized as a quote from the Bible). If the γάρ utterance were deleted, would (37) then constitute a case of sufficient comprehension, or not?

to salvage (36) as an example of elaboration (but do not want to interpret it as providing ‘additional detail’), the same problems associated with (35) arise – Background is a fundamentally fuzzy notion, and (36) is obviously not a Reformulation, Exemplification or Explanation. But if (36) is not elaborative, as the only logical conclusion seems to be, which coherence relation applies here? There seems to be no straightforward answer, as there wasn’t for (32), (33) and (35).

From a relevance-theoretic point of view, the γάρ utterance in (36) is obviously somehow tangled up with Hydaspes’ choice of words. By inserting the γάρ utterance, he focuses attention on his use of ‘daughter’, and is able to tie it in with a separate contextual assumption – namely, that he has just been reunited with his daughter (which induces the use of πρῶτα, ‘for the first time’) but that he will be forced to say goodbye almost immediately (which induces the use of ὕστατα, ‘for the last time’). The γάρ utterance provides information which is tightly linked to (part of) the preceding utterance in the sense that the speaker connects a certain contextual assumption to a certain word. In other words, the γάρ utterance seems to achieve relevance in light of the preceding utterance.

(37) Ἀισωμεν τῷ Κυρίῳ· ἐνδόξως γὰρ²⁰ δεδόξασται· ἵππον καὶ ἀναβάτην ἔρριψεν, οὐκ εἰς θάλασσαν, τοῦτο γὰρ²¹ μεθαρμόζω τῆς ᾠδῆς, ἀλλ’ ὅποι φίλον ἦν αὐτῷ, καὶ ὅπως αὐτὸς ἐδικαίωσεν· Ὁ ποιῶν πάντα καὶ μετασκευάζων, εἶπέ που τῆς ἑαυτοῦ προφητείας Ἀμὼς φιλοσοφῶν ἐνθεώτατα· ὁ ἐκτρέπων εἰς τὸ πρῶτ’ σκιὰν θανάτου, καὶ ἡμέραν εἰς νύκτα συσκοτάζων, καὶ οἶονεῖ διὰ κύκλου τινὸς εὐθύνων καὶ διεξάγων τὸν ἅπαντα κόσμον, καὶ τὰ ἡμέτερα, σαλευόμενά τε ὁμοῦ καὶ μὴ σαλευόμενα, ταῖς μεταβολαῖς κινούμενα καὶ περιτρεπόμενα, καὶ ἄλλοτε ἄλλως ἔχοντα· τῇ τάξει δὲ τῆς προνοίας πάγια καὶ ἀκίνητα, καὶ διὰ τῶν ἐναντίων ὁδεύη, τῷ Λόγῳ μὲν δήλων, ἡμῖν δὲ ἀγνοουμένων· ὁ καθαίρων δυνάστας ἀπὸ θρόνων, καὶ ἀνυπονόητον κοσμῶν διαδήματι· παρὰ γὰρ τῆς θείας καὶ τοῦτο λαμβάνω Γραφῆς. (Greg. *Iul.* I.541.33-49)

[Gregory is raising a song (from Exodus 15) to mark the beginning of his invective:] “‘Let us sing unto the Lord, for He hath glorified Himself marvellously, the horse and the rider He hath cast’ (not into the sea, for this part of the song I alter, but ‘whither it was pleasing to Him, and in what way He thought it fit; the God that doeth and changeth all

²⁰ This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – the γάρ utterance makes clear why they should sing unto the Lord.

²¹ This γάρ utterance is explanatory as well, in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – the γάρ utterance explains, metadiscursively, why God has not cast the horse and the rider *into the sea*. Gregory might expect his audience to expect the addition of ‘into the sea’, and so he adds the γάρ utterance to make sure that his audience doesn’t think he forgot – he just decided to alter the quote.

things’ – as says somewhere in his prophecy, Amos, most divinely philosophizing’). ‘He that turneth into morning the shadow of death, and that darkeneth the day into night,’ and Who, as it were, by means of a certain revolution, directs and corrects the whole world, as well as our affairs, whether tempest-tossed or not tempest-tossed, shaken and upset by its changes, and subject to constant vicissitudes, though by the ordering of His Providence they be fixed and unmoved, even though they move through contrary courses – ways that be clear unto the Word, although unknown to us. ‘He that putteth down the mighty from their thrones, and adorneth with a crown him that expected it not’ (from [gar] Holy Scripture I borrow this as well).”

This example is somewhat different from the previous two.²² It is not a metalinguistic comment on a constituent of the preceding utterance, but, instead, a metadiscursive remark on the provenance of the preceding utterance – Gregory has not come up with the preceding utterance on his own, but has borrowed it from Scripture.²³ Like (35) and (36), it lacks any explanatory component. The fact that Gregory takes his preceding utterance from Scripture, does not explain why it is true, how he knows, why he says it – or why he uses it. In other words, while the γάρ utterance is metadiscursive in that it constitutes a comment on a preceding utterance, it does not explain anything in the strict, causality-based sense I have maintained here. It is akin to the following fragment, from Malcolm Gladwell’s podcast *Revisionist History*²⁴ – Malcolm Gladwell is narrating:

(38) “And the Governor General is the person who swears in the new Prime Minister. When Gillard²⁵ stands up to take the oath of office, it’s a doubly incredible moment. [A woman’s voice cuts in here.] ‘What made it loom large for me that day is, our Governor General at that time was the first woman to ever serve as Governor General.’ This is Julia Gillard telling the story. ‘And I could see in her face and in her eyes, you know, this incredible shock or delight that she was going to be the person to swear in the first woman Prime Minister.’”

The underlined utterance is the relevant one – Gladwell here interrupts his pre-taped interview with Gillard to make clear that she was (and will be) the one talking. In (37),

²² See also Greg. *Iul.* I.545.17 (which is also proleptic – see §4.2.4) and II.688.22.

²³ The quote is a paraphrase of Luke 1:52 – καθεῖλεν δυνάστας ἀπὸ θρόνων καὶ ὕψωσεν ταπεινούς, or ‘He has brought down rulers from their thrones, and He has exalted the humble.’

²⁴ Episode 1, ‘The Lady Vanishes’, from 23:09 onwards. Accessed at <http://revisionisthistory.com/episodes/01-the-lady-vanishes>, 14th of July, 2016.

²⁵ Referring to Julia Gillard, former Prime Minister of Australia.

the γάρ utterance fulfills the same function, indicating ‘who is speaking’ – in this case, Holy Scripture.

Can the γάρ utterance in (37) be placed under the elaboration banner? The concerns I outlined for a coherence analysis of (35) and (36) are relevant here too – while (37) certainly provides ‘additional detail’ in an intuitive sense, we have already seen that Elaboration has not been adequately delineated *vis-à-vis* other types of elaboration (or other coherence relations in general). If it is elaborative in a different way, the exact coherence relation which γάρ would express here is once again a mystery. If it is not elaborative, then it is not clear which other coherence relation would hold. As in the previous two examples, though, it is obvious that the speaker uses γάρ to mark an utterance by which he connects a contextual assumption to a preceding utterance – in this case, the preceding utterance is now linked the assumption that it is derived from Scripture (and not a product Gregory’s own imagination). While this may seem like a very vague analysis of γάρ here (as vague as any ‘additional detail’ account would be, a cynic might say), it is important to keep it in mind, as it will form the first step towards a unitary, relevance-theoretic account of γάρ’s meaning.

4.2.3.3 Exemplifications

The next type of context I will look at is exemplifications. Recall that, under the definition of an elaboration developed in this chapter (see Figure 4.1), Exemplifications are straightforwardly elaborative.²⁶ Examples of an exemplification were already provided in (17) and (18), but there are others. Interestingly, only Basil seems to use γάρ to mark Exemplifications – while it is easy to think of an explanation for why it would occur mostly in expository discourse (where a complicated point may require some concrete examples), it is strange that there are no Exemplifications with γάρ in Gregory.

(39) ἀλλ’ εὖ εἰδέναι, ὅτι πάντα τὰ περὶ αὐτὴν θεωρούμενα εἰς τὸν τοῦ εἶναι κατατέτακται λόγον, συμπληρωτικὰ τῆς οὐσίας ὑπάρχοντα. Εἰς οὐδὲν γὰρ²⁷ καταλήξεις, ἐκάστην τῶν ἐνυπαρχουσῶν αὐτῇ ποιότητων ὑπεξαιρεῖσθαι τῷ λόγῳ πειρώμενος. Ἐὰν γὰρ ἀποστήσης τὸ μέλαν, τὸ ψυχρὸν, τὸ βαρὺ, τὸ πυκνὸν, τὰς κατὰ γεῦσιν ἐνυπαρχούσας αὐτῇ ποιότητας, ἢ εἴ τινες ἄλλαι περὶ αὐτὴν θεωροῦνται, οὐδὲν ἔσται τὸ ὑποκείμενον. (Bas. Hex. I.8.21-28)

²⁶ Denniston (1954²: 66) already noted that γάρ can be used with exemplifications, which he sees as a ‘peculiarity’ in its “causal and explanatory” use (1954²: 60).

²⁷ This γάρ utterance is epistemically causal, providing evidence which indicates why the speaker thinks the preceding state of affairs is true.

[Basil argues that it is of no use to try and discern the ultimate ‘essence’ of the earth – that is, he does not think it is possible to discern that which makes the earth into the earth. He offers an alternative:] “But let us know well that all the phenomena which can be seen around it [a ‘nature’ or φύσις, SZ], are arranged for thinking about its existence, completing its essence. You will arrive at nothing if you try to take away by reason each of the qualities it possesses. If [*gar*] you take away black, cold, weight, density, the qualities which concern its taste – or if any others are observed for it –, nothing will remain.”

(40) Οὐ μὴν οὐδὲ παρὰ Θεοῦ τὸ κακὸν τὴν γένεσιν ἔχειν εὐσεβὲς ἐστὶ λέγειν, διὰ τὸ μηδὲν τῶν ἐναντίων παρὰ τοῦ ἐναντίου γίνεσθαι. Οὔτε γὰρ ἡ ζωὴ θάνατον γεννᾷ, οὔτε τὸ σκότος φωτὸς ἐστὶν ἀρχή, οὔτε ἡ νόσος ὑγείας δημιουργὸς (Bas. *Hex.* II.4.51-4)

[Basil has just argued that ‘darkness’ and ‘evil’ do not overlap.] “That evil has its origin from God, is not pious to say; because the contrary cannot proceed from its contrary. Not [*gar*] does life engender death; darkness is not the origin of light; sickness is not the maker of health.”

In (39), the γάρ utterance does not explain how Basil knows that if you leave a ‘nature’ devoid of any qualities, it will consist of nothing. Instead, it provides an example of this abstract concept in the form of taste (γεῦσιν). The same is true for (40) – the γάρ utterance provides examples of the rule presented in the previous utterance (‘the contrary cannot proceed from its contrary’). In both cases, of course, the γάρ utterance could be taken to provide evidence (and, hence, would amount to an epistemically causal and so elaborative utterance): by providing an example, the speaker also provides evidence for the truth of the preceding assumption.²⁸ As such, Exemplifications may be considered to be relatively close to Explanations, and the above examples (along with (17) and (18)) may then be, in turn, considered to be elaborative.

²⁸ See Blakemore (1996: 330), who states that “exemplification is a very common way of providing evidence for a claim”. For other examples of exemplifications, see Bas. *Hex.* V.6.24, V.9.31 and VIII.7.20.

It should be noted here that there is again much confusion on the notion of ‘Evidence’ in the coherence literature. Mann et al. (1989) propose an Evidence relation (but no Explanation one), while Hobbs (1985) does the opposite. For the former, Exemplification would presumably be subsumed under the Elaboration relation, as they argue that a ‘set: member’ relation would fall under this category (1989: 53). Hobbs (1985), on the other hand, includes a separate Exemplification relation – but also an Elaboration one, which is, then, distinct from Exemplification. He proposes a separate Explanation relation as well, which complicates matters even further, and which indicates that, under Hobbs’ model, γάρ would mark a separate coherence relation in these examples.

4.2.3.4 Reformulations

Exemplifications provide a segue to another type of context in which γάρ occurs: reformulations (Cuenca & Bach 2007: 158).²⁹ Some γάρ reformulations are explanatory:³⁰

(41) καθὸ εἴρηται, Ἀρχὴ σοφίας, φόβος Κυρίου. Οἷον γὰρ κρηπὶς καὶ βάθρον πρὸς τὴν τελείωσιν ἢ εὐλάβεια. (Bas. *Hex.* I.5.44-6)

[Basil is discussing the concept of ‘beginning’.] “It is in this sense that it is said, ‘The beginning of wisdom is the fear of the Lord’ – that is to say [*gar*], the foundation and the base for fulfilment is piety.”

The utterance Basil cites here is from Proverbs (9:10). The γάρ utterance provides a reformulation of the citation – the quote from Proverbs is paraphrased in Basil’s own words, with Basil aiming to make the quote easier to comprehend. Ἀρχή (‘beginning’) is reformulated as κρηπὶς καὶ βάθρον (‘foundation and base’), σοφίας (‘of wisdom’) as πρὸς τὴν τελείωσιν (‘towards fulfilment’), and φόβος Κυρίου (‘fear of the Lord’) as ἡ εὐλάβεια (‘piety’); additionally, the syntactic construction and word order remain intact (‘X is Y’). Οἷον, translated as ‘that is to say’ here (cf. LSJ, s.v. οἷος V.2e), also points to a reformulation. It is often used as a relative demonstrative, correlating with a preceding τοῖος or τοιοῦτος, for instance – meaning something like ‘this... such as’. In that sense, οἷος’ core meaning seems to rely on some sort of parallel with the previous utterance.

Can the γάρ utterance in (41), like those in (39) and (40), be considered an Explanation (and hence, an elaboration)? It may be considered to be epistemically causal in the sense that it provides an explanation for why the writer of Proverbs thinks the 9:10 verse is true. But this raises questions of circularity. Does Basil really provide a reason for believing the preceding utterance which is conceptually distinct from the preceding utterance? Or did he just put the same idea in different words? In committing myself to the proposition ‘the beginning of wisdom is the fear of the Lord’, do I not also commit myself to the proposition ‘the foundation and base for fulfilment is piety’ in a way which is simply not true for unambiguously explanatory examples like (6) and (7) *supra*?³¹ It is also worth noting here that Mann et al. (1989) regard Restatement and

²⁹ I do not capitalize ‘reformulation’ here, as I do not believe γάρ occurs with Reformulations (a thoroughly coherence-based notion), but with reformulations (the theory-neutral concept).

³⁰ For another, very similar example, see Bas. *Hex.* I.5.41.

³¹ The question here is, at its core, about whether the γάρ utterance is an entailment or an implicature of the preceding utterance. If the former is true, Basil would commit himself to the γάρ utterance by uttering the utterance preceding γάρ, in which case there would be obvious circularity. In the latter case, circularity would be less of an issue – implicatures are cancelable, which means they are logically distinct from the source utterance from which they are derived (here, the utterance preceding γάρ). As stated above, I think the γάρ

Elaboration as two separate relations – as with Exemplifications, then (see footnote 28), certain coherence models would view γάρ as marking a separate coherence relation in (41). On the model of elaboration in Figure 4.1, both Exemplifications and Reformulations would be subsumed under the ‘elaboration’ heading, and the question would be somewhat moot, of course.

A more straightforwardly non-explanatory example of reformulation can be found under (42):

(42) Ταῦτα εἰδὼς καὶ ὁ θεῖος Δαβὶδ, ἔν τι τῶν ἀγαθῶν καὶ τὸ συνεστάλθαι τίθεται· καὶ χάριν ὁμολογεῖ τῷ συστείλαντι, ὡς τοῦ τὰ δικαιώματα μαθεῖν ἐντεῦθεν προσγινομένου· καὶ, Πρὸ τοῦ με ταπεινωθῆναι, φησὶν, ἐγὼ ἐπλημμέλησα· διὰ τοῦτο τὸ λόγιόν σου ἐφύλαξα· μέσσην πλημμελείας τε καὶ διορθώσεως τιθεὶς τὴν ταπείνωσιν, ὡς ἐκ μὲν ταύτης γεννωμένην, τὴν δὲ γεννήσασαν· ἁμαρτία μὲν γὰρ ταπεινώσεως μήτηρ, ἐπιστροφῆς δὲ ταπείνωσις. (Greg. *Iul.* I.560.8-17)

[Gregory is discussing the familiar maxim that it is easier to obtain ‘good things’ (τὰ ἀγαθὰ) than it is to retain them.] “Of this the divine David was well aware, and reckons also as of his blessings, the fact of his being chastened, and confesses his thankfulness to Him, Who had chastened – as his learning of the commandments accrued from there on. And, ‘Before I was humbled (says he), I went astray: on this account I have kept Thy word’, placing his humiliation in the middle between his transgression and his correction, seeing that it arose out of the first, and produced the second; sin [*gar*] is the parent of humiliation, and humiliation of repentance.”

The γάρ utterance here puts the previous utterance in more metaphorical terms, but cannot be said to explain it in any way. It also does not provide additional detail about the preceding utterance.³² It is a reformulation: it takes the notion of ‘bringing forth’ (γεννάω) from the utterance preceding γάρ and reformulates it in terms of parentage (μήτηρ) – the transgression (πλημμελείας) did not just bring forth humiliation (ταπείνωσιν), it was humiliation’s mother (with ἁμαρτία being a quasi-synonym of

utterance is an entailment (the utterance preceding γάρ cannot be true if the γάρ utterance is not true), but some may argue against that view – they would probably focus on the putative identity, on an entailment analysis, between ‘the fear of the Lord’ and ‘piety’ and, in particular, ‘wisdom’ and ‘fulfilment’. Another possible argument in favor of an Explanation analysis has to do with speaker intention. We all use flawed reasoning every day – there is no reason to suppose that, even if (41) were an example of circular reasoning, Basil is an infallible, unfailingly benevolent speaker who would never employ a fallacious argument. So it could be the case that the γάρ utterance is *intended* to be explanatory here, even though it may not make any sense as such from a logico-deductive point of view. Since we cannot speak to Basil to ask what he thinks of this, a solution to this problem is not at hand.

³² See Greg. *Iul.* I.552.21 for another example.

πλημμελείας); humiliation did not just bring forth correction (διορθώσεως), it was the mother of repentance (with ἐπιστροφῆς being a quasi-synonym of διορθώσεως). By reformulating the preceding utterance in more straightforward, metaphorical terms, Gregory might be hoping that this assumption will stick in his audience's mind. As a reformulation, (42) would fall under the broad definition of an elaboration maintained here.

The next example is reformulative as well, but it is distinct from the previous two instances all the same³³:

(43) τὸ δὲ τῆς ἐν τῷ προστάγματι διανοίας πολύχουν τοσοῦτόν ἐστιν, ὅσαι καὶ αἱ τῶν ἰχθύων διαφοραὶ καὶ κοινότητες, οἷς πᾶσι δι' ἀκριβείας ἐπεξελθεῖν, ἴσον ἐστὶ καὶ κύματα πελάγους ἀπαριθμεῖσθαι, ἢ ταῖς κοτύλαις πειρᾶσθαι τὸ ὕδωρ τῆς θαλάσσης ἀπομετρεῖν. Ἐξαγαγέτω τὰ ὕδατα ἐρπετά. Ἐν τούτοις ἔνι τὰ πελάγια, τὰ αἰγιαλώδη, τὰ βύθια, τὰ πετρώδη, τὰ ἀγελαῖα, τὰ σποραδικὰ, τὰ κήτη, τὰ ὑπέρογκα, τὰ λεπτότατα τῶν ἰχθύων. Τῇ γὰρ αὐτῇ δυνάμει, καὶ τῷ ἴσῳ προστάγματι, τό τε μέγα καὶ τὸ μικρὸν μεταλαγχάνει τοῦ εἶναι. (Bas. Hex. VII.1.43-53)

[Basil is discussing the Genesis verse 'Let the waters produce moving creatures'.] "(This command has only required one word, even less than a word, a sign, a motion of the divine will,) and it has such a wide sense that it includes all the varieties and all the families of fish. To review them all in detail would be to undertake to count the waves of the ocean or to measure its waters in the hollow of the hand. 'Let the waters produce moving creatures'. In these words are contained those which people the high seas and those which love the shores; those which inhabit the depths and those which attach live on rocks; those which are gregarious and those which live dispersed, the cetaceous, the huge, and the tiny. It is [*gar*] from the same power, the same command, that all, great and small, receive their existence."

Whereas (41) and (42) were paraphrastic reformulations, in Rossari's (1994: 17) terms, (43) is non-paraphrastic. The point of the former is to provide a different perspective on the same assumption – in (41), the assumption is reformulated in other terms in order to make sure that Basil's audience derives the right message (as Rossari (*ibid.*) puts it, one of the points of a paraphrastic reformulation is to provide a "clarification"). In (42), the assumption is reformulated in metaphorical terms, possibly in order to provide the audience with a maxim-like one-liner which is easy to remember. (43) is different – there is no different perspective here, but a summary of what has just been stated. What γάρ introduces here is, in essence, the opposite of an Exemplification. It takes the

³³ For other examples, see Bas. Hex. II.3.3, VI.9.29 and VIII.1.10.

preceding examples of water creatures ('those which people the high seas', 'those which love the shores', 'those which live dispersed', etc.) together as τό τε μέγα καὶ τὸ μικρὸν ('great and small') and recaps the point Basil is making here – that all of these creatures came into being due to God's command, 'Let the waters produce moving creatures'. In that sense, γάρ here seems to function similarly to French *bref* or *en somme*, which Rossari (ibid.) considers non-paraphrastic 'reformulation markers'.³⁴

One interesting reformulative example from Heliodorus has to be mentioned here:

(44) Ἡ δὲ «καὶ τίς ἂν εὐρεθείη, φιλτάτη» ἔφη, «τοῦ δυναμένου λῦσαι τὰ νῦν ἐκποδῶν γεγονότος καμὲ τῆς παρ' ἐλπίδας τῶν δικαζόντων φιλανθρωπίας ἀνελούσης; Εἰ γὰρ ἐβέβλητο τοῖς λίθοις, εἰ γὰρ ἀνήρητο, πάντως ἂν κάμοι συνετεθνήκει τὰ τοῦ πάθους. (Hel. Aeth. 1.15.3.1-6)

[Demaenete, madly in love with her stepson Cnemon, has managed to get Cnemon exiled because he rejected her advances. Now she is full of regret:] “‘And who could be found,’ replied she, ‘while he who could resolve my present issues is away, and the unhopd-for leniency of those that gave sentence on him has brought me to destruction? If he had been stoned, if [*gar*] he had been brought to death, also in me would have been dead completely my desire.’”

There are two possible ways of explaining γάρ's presence here. The first one involves the assumption that Demaenete (via Heliodorus) just repeats the previous γάρ (in εἰ γὰρ ἐβέβλητο τοῖς λίθοις, 'if [*gar*] he had been stoned') – both γάρ's would then mark elaborations of the same utterance (i.e., the previous one: καμὲ τῆς παρ' ἐλπίδας τῶν δικαζόντων φιλανθρωπίας ἀνελούσης, or 'the unhopd-for leniency of those that gave sentence on him hath brought me to destruction'). Both elaborations would have the same apodosis (πάντως ἂν κάμοι συνετεθνήκει τὰ τοῦ πάθους, or 'also in me would have been dead the blazing flames of my burning desire'), but a different protasis.

The second way of explaining the underlined γάρ would involve a reformulation – in that case, the underlined γάρ would not apply to the preceding utterance (καμὲ ... ἀνελούσης), but to εἰ γὰρ ἐβέβλητο τοῖς λίθοις. The γάρ utterance would, on this view, amount to a reformulation of the preceding protasis, making explicit its most important implicature – the two protases would be translated as 'If he had been stoned – *that is, if he had been brought to death –*, ...' (with the γάρ utterance in italics).

Both interpretations would involve elaborations of some sort, but they would apply to different utterances. However, comparing the two options, it is the reformulative interpretation which makes the most sense. For one, it would seem strange that two

³⁴ See Bas. Hex. VII.1.51 for another example of a non-paraphrastic reformulation.

separate elaborations would involve the same apodosis. Semantically, additionally, there is a clear interdependence between the two protases – if someone is stoned, he will probably be dead. Note that the underlined γάρ, on this interpretation, would fall under the scope of the first γάρ, which marks the elaboration as a whole.

To finish up this section on reformulations, let's look at some intriguing cases of reformulations with γάρ which are not clausal, but phrasal:

(45) «Μὴ ἀπίσται» ἔφη «βούλεσθαί με πάντα σοι χαρίζεσθαι, ἥτις καὶ ἑμαυτὴν ἑτοιμος ἐκδιδόναι· ἀλλὰ προληφθεῖσα ἐπώμοσα ἐκδώσειν Ἀχαιμένει τὴν σὴν ἀδελφήν.» «Εὖ» ἔφη «ὦ δέσποινα· τὴν ἀδελφὴν τοίνυν ἥτις ἐστὶν ἐκδίδου· μνηστὴν δὲ τὴν ἐμὴν καὶ νύμφην καὶ τί γὰρ ἄλλο ἢ γαμετὴν οὔτε θελήσεις, εὖ οἶδα, οὔτε θέλουσα ἐκδώσεις.» (Hel. Aeth. 7.26.4.2-7)

[Theagenes states that he will accept Arsace's offer of an affair between themselves if she cancels the proposed marriage between Chariclea (whom Arsace still thinks to be his sister) and Achaemenes. Arsace reacts:] “‘Do not disbelieve’, she said, ‘that I will anything to pleasure you, since I am ready to deliver myself into your hands. But I have promised by oath to marry your sister to Achaemenes.’ ‘It is well then,’ said he [i.e., Theagenes, SZ], ‘mistress; you may marry my sister to him, whoever she be. But my fiancée and spouse and what [*gar*] else than wife you will not give away, I know for sure; not even if you wanted to, can you .’”

(46) Δουλείαν ὥμην ἐκπεφυγέηναι, δουλεύω πάλιν· δεσποτήριον, καὶ φρουροῦμαι· νῆσος εἶχέ με καὶ σκότος· ὅμοια τὰ νῦν ἐκείνοις, ἀληθέστερον δὲ εἰπεῖν καὶ πικρότερα, τοῦ καὶ βουλομένου καὶ δυναμένου παραμυθεῖσθαι ταῦτα κεχωρισμένου· σπήλαιον ἦν μοι ληστρικὸν εἰς τὴν παρελθοῦσαν τὸ καταγώγιον, ἄδυτον καὶ βάραθρον καὶ τί γὰρ ἄλλ' ἢ τάφος ἢ οἴκησις; (Hel. Aeth. 5.2.8.1-5.2.8.8)

[Cnemon has put his ear on the door of a room where he hears a woman wailing:] “‘I thought I had escaped bondage; but now I am a captive again in prison. I was on an island and dark place; this present state is like to it, or, to speak more truly, even worse – for he who both could and would by comfort abate my sorrows is separated from me. A den of thieves yesterday was my inn; not to be entered and a pit and what [*gar*] but a grave was my home?’”

Both instances follow the same pattern: a constituent which was described before the γάρ utterance is designated differently by dint of a τί γὰρ ἄλλο ἢ X (‘what else than X’) construction, where X is filled in with another term referring to the already introduced

concept.³⁵ As such, γάρ here marks a clear case of (metalinguistic) reformulation. This is especially obvious in (45): Theagenes reveals that Chariclea is not his sister, but his fiancée (μνηστήν) and spouse (νύμφην), before asking, through a rhetorical question introduced by τί and marked by γάρ, what else she could be other than his wife (γαμετήν). The way in which her status as γαμετήν is announced, is telling as well. The rhetorical question suggests that no other logical conclusion is possible – if Chariclea is his fiancée and spouse, then surely she can be nothing else than his wife? In this sense, there is a clear inferential link between the γάρ segment and the previous part of the utterance, which functions as the basis for the reformulation.

As stated, γάρ here has scope over a phrase and not a clause. This is curious, as it had been clausal in all examples I had discussed up until (45). Even more puzzling is the fact that it does not seem to have any connective value here – the link with the previous utterance is made by καί. Put differently, there would not be any asyndeton if γάρ were deleted from the utterance. To my knowledge, this phrasal, non-connective use has never been mentioned in the secondary literature, which may be due to a lack of occurrences.³⁶ It is also clearly reformulative in (46), where the inferential link with the preceding part of the utterance comes to the fore even more than in (45). The woman (Thisbe, as it turns out) describes her lodgings (τὸ καταγώγιον) as a cave (σπήλαιον) which was ‘not to be entered’ (ἄδυτον) and a ‘pit’ (βάραθρον). On the basis of these three traits (and the latter two in particular), what could it be considered other than a grave (τάφος)? We already knew that she had been staying in a cave, but with the addition of ‘not to be entered’ and ‘pit’, it becomes obvious that her σπήλαιον can be reformulated, much more dramatically, as a τάφος.

As we have seen in the δέ chapter, relevance theory considers reformulations to be instances of interpretive use – the speaker uses his utterance not to say something about the world, but about another utterance. Both δέ and γάρ, then, can be used to mark interpretive use (or reformulations) – interpretive use cross-cuts the domains of the different DMs. This suggests that interpretive use is basic to how we think and speak, and that it can be used in various ways. However, the underlying goal is the same – to ensure the relevance of the source representation which is communicated. By reformulating it (whether that reformulation is marked by δέ, γάρ, something else, or nothing at all), the speaker wants to make sure that her audience understands her and the conceptual representation she wants to convey, and aims to get her point across clearly and efficiently. With δέ, she indicates that the reformulation is more neutral – it

³⁵ For one other example, see Hel. *Aeth.* 8.7.3.3.

³⁶ Not only does the expression καὶ τί γάρ ἄλλ’ ἢ occur very infrequently (6 times in Eusebius, 5x in Philo Judaeus and 5x in Procopius – and these are the authors with the highest incidence), but it also occurs exclusively in Post-Classical Greek (starting with Philo, i.e., not before the end of the 1st century BC).

is focused on the contextual continuity with the preceding utterance, while also indicating that the upcoming utterance stands on its own (which explains why it is used with corrections, as discussed in §3.2.3.3); with γάρ, the focus is more narrowly on how the upcoming segment provides contextual assumptions which help the hearer understand (an)other assumption(s). In that regard, it's no coincidence that there are no instances of γάρ with corrections in my corpus – the γάρ segment is not a better way of expressing another representation; it interpretively resembles the latter to help the hearer understand it better.

4.2.3.5 Shell contexts

The type of context which most comprehensively dispels the notion that γάρ marks Explanations, elaborations or subsidiarity, is what I have already termed the 'shell' context, following Schmid (2000). (10) and (11) can be considered instances of this use, as can (25) – repeated here for convenience:

(25) Τὰ μὲν οὖν πρῶτα τῆς ἐγχειρήσεως αὐτῷ, καὶ λίαν νεανικὰ, καὶ πολλοῖς τῶν τὰ ἐκείνου φρονούντων περιβοώμενα ταῦτα. Τὴν γὰρ τῶν Ἀσσυρίων ὅσῃν διαρρέων ὁ Εὐφράτης, καὶ τὴν Περσίδα παραμειβόμενος, ἐκεῖσε τῷ Τίγριδι μίγνυται, ταύτην ἐλὼν καὶ τεμὼν, καὶ τινὰ τῶν φρουρίων ἐξελὼν κατὰ πολλὴν τοῦ κωλύσοντος ἐρημίαν, εἴτ' οὖν λαθὼν διὰ τὸ τῆς ἐφόδου τάχος, εἴτε ὑπὸ Περσῶν οὕτω στρατηγούμενος, καὶ κατὰ μικρὸν ὑπαγόμενος εἰς τοῦμπροσθεν [...]. (Greg. *Iul.* II.676.6-15)

[Gregory is recounting how Julian planned to bring paganism back to the Roman empire:] “Now, the first steps in his enterprise, excessively audacious and much celebrated by those of his own party, were as follows. The [*gar*] land of the Assyrians that the Euphrates flows through, and skirting Persia there unites itself with the Tigris; this he took and ravaged, and captured some of the fortified towns, in the total absence of anyone to hinder him, whether that he had taken the Persians unaware by the rapidity of his advance, or whether he was out-generalled by them and drawn on by degrees further and further into the snare, [...].”

The shell here is τὰ πρῶτα – it encapsulates the information marked by γάρ.³⁷ The speaker first provides a frame of interpretation (i.e., the shell), to which the information contained within the γάρ utterance is linked. One of the reasons for using a shell construction, according to Schmid (2000: 13), is that it offers the speaker a noun phrase to which a more extensive and complex set of assumptions can be connected. As such,

³⁷ As stated, the γάρ utterance – that is, the linguistic material which falls under γάρ's scope – continues on after (25). I have cut it off here for reasons of space.

shells' general function lies in the characterization of this set of assumptions (Schmid 2000: 308) – in the case of (25), Julian's plan to move into Persia is characterized as the 'first steps' in his attempts to bring paganism back to the Roman empire. Chunking information in this way also ensures that the speaker's discourse is easier to follow and, hence, easier to process from a cognitive point of view.³⁸

Although the notion of shells was developed for abstract nouns like *fact* and *idea* (as in *the fact is that...* or *this idea that...* – see (12) for an example), I believe it is perfectly suited for explaining a γάρ utterance such as the one in (25). The fact that (25) (and the examples to be discussed below) does not contain shell nouns in the strict, abstract sense outlined by Schmid, does not detract from the observation that γάρ can be used to give form to quite general and vague noun phrases mentioned in preceding utterances.

It should be noted here that this does not mean that γάρ's function here lies in indicating that a shell's encapsulated information will follow. Rather, γάρ's function in the type of instances exemplified in (25) and *infra* is entirely in line with its function in the other contexts I have discussed – it provides contextual assumptions which lead to a better or easier understanding or acceptance of another assumption or set of assumptions.

In (26), the shell τὰ περὶ αὐτὴν ('the things which happened to her') encapsulated the information in the γάρ utterance:

(26) Ὡς δὴ καὶ τότε ὁ Κνήμων ἔφευγέ τε τὰ πάντων μᾶλλον αἰρετὰ καὶ φοβερά τὰ ἥδιστα ὑπελάμβανεν, ἦν γὰρ οὐ Θίσβη τὸ θρηνοῦν γύναιον ἀλλὰ Χαρίκλεια. Ἐγεγόνει δὲ τὰ περὶ αὐτὴν ὥδε· ἐπειδὴ γὰρ ὁ μὲν Θύαμις ἀλούς ἐζώγρητο καὶ εἶχετο αἰχμάλωτος ἡ δὲ νῆσος ἐνεπέπρηστο καὶ τῶν ἐνοίκων ἐκεκένωτο βουκόλων, ὁ μὲν Κνήμων καὶ Θέρμουθις ὁ τοῦ Θυάμιδος ὑπασπιστὴς ἐῷσι τὴν λίμνην διέπλευσαν ὃ τί ποτε τὸν λήσταρχον ἔδρασαν οἱ πολέμιοι κατασκοπήσοντες· ἔσχε τε τὰ κατ' αὐτοὺς ὡς δὴ καὶ εἴρηται. [...]. (Hel. Aeth. 5.4.2.1-5.4.3.7)

[Cnemon thinks he heard Thisbe through a door. He is shocked – he was quite convinced she was dead.] “And so on this occasion as well Cnemon shrank from that which he preferred to all the world, and viewed with terror what gave him most delight. For the wailing woman was not Thisbe, but Chariclea. Now, what had happened to her was this. When [*gar*] Thyamis had been captured alive and was held as a prisoner, and the island had been set ablaze and had been evacuated by its herdsmen inhabitants, Cnemon and Thermouthis, the henchman of Thyamis, crossed over the lagoon at dawn

³⁸ See Givón (2001: 223) and Chafe (1994). Also e.g. Janse (1993), Bakker (1997), Slings (2002) and Scheppers (2011) for Ancient Greek; Soltic (2015) for Byzantine Greek. See Soltic (2015: 42-47) for an overview of earlier approaches to this type of chunking.

to discover in what way the enemy had dealt with the brigand chief. How it fared with them has already been told. [...].”

As in (25), the linguistic material contained under γάρ’s scope extends beyond the fragment I have quoted here. However, (26) does give a clear sense of the encapsulated status of the information marked by γάρ – without the γάρ utterance, the narrative would be incomplete.³⁹ More to the point, it would simply not make any sense – the twist here is that the woman Cnemon heard through the door is not Thisbe, but Chariclea. Without the addition of the γάρ utterance, Heliodorus’ audience would not be able to square this with the rest of the story – how did Chariclea get here, and what is she doing here? The gap between where we left her and where we have now encountered her again, is closed through the addition of the γάρ utterance. The shell τὰ περὶ αὐτήν provides a frame under which this information is contained, and at the same time characterizes this information as recounting what has happened to Chariclea that she is here, with Cnemon and Calasiris. Note, in this respect, that ὧδε (and ταῦτα in (25)) is cataphoric – the speaker points forward linguistically, with the cataphor requiring saturation in the upcoming segment. Combined with the obvious centrality of the information presented in the γάρ utterance, a subsidiary analysis is next to impossible here. In fact, if there is subsidiarity in (26), the utterance preceding γάρ would seem to warrant that status – it provides a shell for more important information.

Note that (26), like (25), also cannot be considered to be elaborative. It does not explain how the speaker knows the previous state of affairs to be the case, as there is no previous state of affairs to refer back to. It does not provide ‘additional detail’ either, as it presents both core information and details about a part of the narrative which the audience knows nothing about. The shell analysis provides a theoretically grounded way of looking at these examples. This approach also jibes with what I have already said about γάρ’s function. It would be challenging to subsume (25) and (26) under an elaborative approach in particular and a coherence analysis in general – which coherence relation would hold between γάρ and its preceding utterance? How would it be related to the other coherence relations which γάρ can mark? More generally, are there also coherence relations which γάρ *cannot* mark? These and other questions would remain. On a more cognitively-oriented, RT approach, these examples are not surprising – if γάρ marks information as contextually constraining the interpretation of another utterance, it would not be out of the ordinary for it to occur with encapsulated information meant to be constrained within a preceding shell.

³⁹ Cf. also Hel. *Aeth.* 2.8.4.1.

(47) Εἰ δὲ ταῦτά σοι κακουργίας εἶναι δοκεῖ τὸ λεῖον ἡμφιεσμένης, καὶ πόρρω βασιλικῆς μεγαλοπρεπείας, φέρε, σοι παραστήσω καὶ τὰ τούτων ἔτι κερδαλεώτερα. Ὅρων γὰρ τὸν ἡμέτερον λόγον μέγαν μὲν ὄντα τοῖς δόγμασι καὶ ταῖς ἄνωθεν μαρτυρίαις, τὸν αὐτὸν παλαιὸν τε καὶ νέον· παλαιὸν μὲν ταῖς προρρήσεσι, καὶ τοῖς ὑπαστράπτουσι κινήμασι τῆς θεότητος· νέον δὲ τῇ τελευταίᾳ θεοφανείᾳ, καὶ τοῖς ἐκ ταύτης τε καὶ περὶ ταύτην θαύμασιν· ἔτι δὲ μείζω καὶ γνωριμώτερον τοῖς παραδεδομένοις, καὶ εἰς τόδε τετηρημένοις τύποις τῆς Ἐκκλησίας· ἵνα μηδὲ τοῦτο ἀκακούργητον μένη, τί μηχανᾶται, καὶ τί ποιεῖ; Μιμεῖται Ῥαψάκην τὸν Ἀσσύριον· ἐστρατήγει δὲ ἄρα τῷ βασιλεῖ τῶν Ἀσσυρίων Σεναχηρείμ. Οὗτος, ἐπὶ τὴν Ἰουδαίαν στρατεύσας, καὶ δυνάμει πολλῇ καὶ χειρὶ τὰ Ἱεροσόλυμα πολιορκῶν, καὶ τῇ πόλει προσκαθεζόμενος. ἐπειδὴ μήτε δυνάμει παραστήσασθαι τὴν πόλιν οἷός τε ἦν, μήτε τι τῶν ἔνδον αὐτῷ παρὰ τῶν προδοτῶν ἐνεδίδото, λόγοις ἡμέροις καὶ ὁμογλῶσσοις ὑποποιεῖσθαι τὴν πόλιν ἐπιχειρεῖ. [...]. (Greg. *Iul.* I.645.29-I.648.20)

[Gregory has been accusing Julian of being the first Christian to rise against God.] “If the above charges seem to thee to indicate an accusation smoothly clothed, and unsuited to the imperial dignity; come, I will advance to you others yet more to the purpose than these. Perceiving [*gar*] that our cause was strong, both in its doctrines and also in the testimonies from on high, and that it was at once both old and new – old, that is, by the prophecies and the inspiration of the Deity that flashed through it; new by the final manifestation of the Godhead, and the miracles springing out of and during this manifestation, but still stronger and more conspicuous in the types of the Church that have been handed down and observed for this purpose – in order, I say, that not even this side should remain exempt from his mischief, what does he do, and what does he plan? He follows the example of Rabshakeh the Assyrian. This person was a general of Sennacherib, king of the Assyrians. This king having marched into Judaea, and besieging Jerusalem with a great force and army, touching down before the city, when he found himself unable to reduce it by force, neither was any hope held out to him from traitors within, he attempts to win over the city by means of soft and smooth-tongued words. [...].”

The shell here is τὰ τούτων ἔτι κερδαλεώτερα (‘things even more to the purpose than the previous ones’).⁴⁰ Gregory is transitioning from his previous charges against Julian to some new ones, introduced as being even more important than the ones already discussed. The γάρ utterance then launches into this charge: Julian attempted to win over Jerusalem and its Jewish population. Again, the utterance preceding γάρ introduces

⁴⁰ Other examples can be found at Greg. *Iul.* I.573.3, where τεκμήριον (‘proof’) is the shell; and I.636.31, where τὴν αἰτίαν (‘the reason’) is the shell.

the subject of the next part of the discourse, and γάρ then gets to the ‘meat’ of the utterance, describing one of Julian’s transgressions – the future παραστήσω (‘I will advance’) points forward here, indicating that something will follow. That something is given form by way of a γάρ utterance. There is no subsidiarity here, nor any elaboration – these analyses assume that there is a more central discourse segment to which the γάρ utterance would apply, a position which is simply not tenable for any of the three instances I have discussed here.

(48) τί οὐχὶ καὶ μηχανὴν τινα πρὸς περιγραφὴν τῶν φοβούντων ἐπινοεῖς; δεινὴ δέ τις ἔοικας εἶναι σοφιστεῦσαι κατὰ τῶν ἐπιχειρούντων διαδύσεις τε καὶ ὑπερθέσεις.» Ἀνείθη πρὸς ταῦτα μικρὸν ἢ Χαρίκλεια καὶ «Εἰ μὲν ἀληθεύεις» εἶπεν «ἢ παιδιάν με πεποίησαι, παρείσθω τὸ παρόν· ἐγὼ δὲ τέχνην ἅμα τῷ Θεαγένει μὲν καὶ πρότερον ἐπιχειρηθεῖσαν ὑπὸ δὲ τῆς τότε τύχης διακοπεῖσαν εἰσηγήσομαι καὶ νῦν ἐπ’ ἀμείνοσι ταῖς τύχαις· τῆς γὰρ νήσου τῆς βουκολικῆς ἀποδρᾶναι διανοηθεῖσιν ἐδόκει τὴν ἐσθῆτα μεταμφιασμένους ἐς τὸ λυπρότατον καὶ πτωχοῖς ἑαυτοὺς ἀπεικάσαντας οὕτως ἐπιμίγνυσθαι κώμαις τε καὶ πόλεσιν. (Hel. Aeth. 6.9.7.5-6.10.1.9)

[Chariclea is afraid that Thyamis will once again desire her when she returns to see him. Calasiris is trying to assuage her fears:] “Why cannot you invent some device to elude that which you so dread? You are very crafty, it seems, and skilful to make shifts, and delays against them that seek to have you.’ Chariclea was somewhat merry at these words and answered: ‘Whether you say this in earnest or in jest, let it pass for this time. But I will tell you the way that Theagenes and I devised – although fortune would not let us put it into practise, it may now suffer better luck. When [*gar*] we planned to escape from the herdsmen’s island, we decided to change our apparel, and wander about in the villages and towns like ragged and dirty beggars.”

In this case, the shell is the τέχνην (‘plan’) which Chariclea and Theagenes devised.⁴¹ Note that this shell is already being encapsulated prior to the γάρ utterance – it is described as a plan which they devised together and which they were not able to carry out. Note that, as in (47), the utterance preceding the γάρ utterance contains a future (εἰσηγήσομαι, ‘I will tell’) – again, this future indicative prepares the assumptions conveyed in the γάρ utterance, paving the way for a discussion of the plan Chariclea is talking about. What the plan itself consisted of, however, is only made explicit in the utterance marked by γάρ – Chariclea and Theagenes had planned to disguise themselves as beggars. As in the previous examples, Chariclea’s utterance would not make much

⁴¹ For other examples, cf. Hel. Aeth. 2.33.1.2 (the shell here is ἅπερ ἐξῆς ἐπέραινεν ὁ Χαρίκλῆς (‘the things which Charicles said next’)) and 4.10.4.3 (where the shell is δυοῖν, ‘two [reasons]’).

sense without the γάρ utterance – Chariclea states that she will tell Calasiris about her plan (εἰσηγήσομαι, ‘I will tell’), but this metadiscursive promise is entirely subsidiary to the contents of the plan laid out in the γάρ utterance.

(49) πρὸς δὲ τοὺς μύστας Ἰσὶν τὴν γῆν καὶ Ὅσιριν τὸν Νεῖλον καταγγέλλουσι, τὰ πράγματα τοῖς ὀνόμασι μεταλαμβάνοντες. Ποθεῖ γοῦν ἀπόντα ἢ θεὸς καὶ χαίρει συνόντι καὶ μὴ φαινόμενον αὖθις θρηνεῖ καὶ ὥς δὴ τινα πολέμιον τὸν Τυφῶνα ἐχθραίνει, φυσικῶν τινῶν, οἶμαι, ἀνδρῶν καὶ θεολόγων πρὸς μὲν τοὺς βεβήλους τὰς ἐγκατεσπαρμένας τούτοις ὑπονοίας μὴ παραγυμνούντων, ἀλλ’ ἐν εἴδει μύθου προκατηχούντων, τοὺς δὲ ἐποπτικωτέρους καὶ ἀνακτόρων ἐντὸς τῇ πυρφόρῳ τῶν ὄντων λαμπάδι φανότερον τελούντων.

Τοῦτό τοι καὶ ἡμῖν εὐμένεια μὲν εἶη τῶν εἰρημένων, τὰ μυστικώτερα δὲ ἀρρήτῳ σιγῇ τετιμήσθω, τῶν κατὰ Συήνην ἐξῆς περαινομένων. Τῆς γὰρ δὴ τῶν Νειλῶν ἐορτῆς ἐνεστηκυίας οἱ μὲν ἐγχώριοι πρὸς θυσίαις τε καὶ τελεταῖς ἦσαν τοῖς μὲν σώμασιν ἐπὶ περιεστηκόσι δεινοῖς κάμνοντες ταῖς ψυχαῖς δὲ τῆς περὶ τὸ θεῖον εὐσεβείας ἐκ τῶν ἐνόντων οὐκ ἀμνημονοῦντες [...]. (Hel. Aeth. 9.9.4.6-9.10.2.5)

[The narrator is expounding on the features of the Nile, and the common folk’s beliefs surrounding it. Then he marks a transition to a new part of his discussion] “Their divines say that the earth is Isis and the Osiris is the Nile, changing things with these names. The goddess yearns for his company and rejoices when he is with her, but mourns when he is absent, hating Typhon as her enemy. The natural philosophers, I think, and priests do not reveal the meaning of this tale to the profane but in the form of a fable only instruct them. Those who are admitted to the higher mysteries as well, they initiate more brightly with the light-bearing torch of truth.

Let this suffice to be spoken at this time by the grace of God. As for the great secrets let them be honoured by silence, while we proceed orderly with what was done in Syene next. When [*gar*] the Nile-feast was come the inhabitants fell to sacrifices and rites, and though their bodies were busied with their present perils, yet their minds were godly disposed, losing sight of their current situation. [...].”

In this last example of straightforward shell contexts, the shell is τῶν κατὰ Συήνην (‘the things which happened at Syene’). As in the other examples (except for (48)), the γάρ utterance is again cut off (it runs on for quite a few more lines), but it gives a sense of the encapsulated information contained within it. In the preceding utterances, the narrator had considered the beliefs surrounding the Nile, but with τῶν κατὰ Συήνην ἐξῆς περαινομένων (‘while the things which happened at Syene will be discussed’), we get a metadiscursive transition to a new subject. There are no grounds for supposing that the γάρ utterance is anything less than central to the narrative – the narrator now turns to his core narrative again, which for the moment revolves around the Persians’ flight from Syene.

I have approached what I have termed the ‘shell’ use of γάρ conservatively – there are several instances of γάρ utterances which could conceivably be considered to contain encapsulated information *vis-à-vis* a shell in the preceding utterances, but which could also be considered to be explanatory (specifically, epistemically causal). If we open up shell contexts to include these instances, this construction would appear much more frequently:

(50) Καὶ ὁ λόγος ὡς πάνσοφος τοῦ φονευτοῦ καὶ προστάτου, καὶ παρανόμου καὶ νομοθέτου, ἢ, ἴν’ οἰκειότερον εἶπω, τοῦ ἐχθροῦ καὶ ἐκδικητοῦ, κατὰ τὸν ἡμετέρον λόγον· εἶναι γὰρ τοῦ ἡμετέρου νόμου μήτε ἀμύνεσθαι, μήτε δικάζεσθαι, μήτε κεκτῆσθαι τι τὴν ἀρχὴν, μήτε νομίζειν ἴδιόν τι· ἀλλὰ ζῆν ἐτέρωθι, καὶ τῶν παρόντων καταφρονεῖν ὡς οὐκ ὄντων· κακοῦ δὲ μὴ ἀντιδιδόναι, μηδὲ ἐξεῖναι, κακόν· μηδὲ τὴν παρειὰν παιομένους φεῖδεσθαι τῆς ἐτέρας, ἀλλὰ καὶ ταύτην ἐμπαρέχειν τῷ παίοντι, καὶ τὸν χιτῶνα τῷ ἱματίῳ προσαποδύεσθαι. [...]. (Greg. *Iul.* I.632.7-17)

[According to Gregory, Julian attempted to remove Christian from protection under the laws.] “And how very clever was the argument of him that was at once executioner and sovereign, law-breaker, and law-maker; or, to speak more fittingly, ‘enemy and avenger’, according to our way of speaking. [He said that] [*gar*] ‘it was part of our religion neither to resist injury nor to go to law, nor to possess anything in the way of power, nor to consider anything one's own, but to live in the other world, and to despise things present as though they were not; that it was also not lawful for anyone to return evil for evil; and not, when they are smitten on the one cheek, to spare the other, but to also offer the other to the one who smites; and to be stripped of the coat after the cloak. [...]’”

(51) Ἐπεὶ δὲ καὶ αὐτῶν ἐντὸς ἦκειν τῶν ἀνακτόρων, τὴν θεὸν ὑπαντῶσαν ἐγχειρίζειν τε τὴν Χαρίκλειαν καὶ λέγειν «ὦ Θύαμι, τήνδε σοι τὴν παρθένον ἐγὼ παραδίδωμι, σὺ δὲ ἔχων οὐχ ἔξεις, ἀλλ’ ἄδικος ἔση καὶ φονεύσεις τὴν ξένην· ἡ δὲ οὐ φονευθήσεται.» Ταῦτα ὡς εἶδεν ἀμηχάνως διῆγε, τῇδε κάκεῖσε τὸ δηλούμενον ὅ τι ποτέ ἐστιν ἀναστρέφων. Ἦδη δὲ ἀπειρηκῶς ἔλκει πρὸς τὴν ἑαυτοῦ βούλησιν τὴν ἐπίλυσιν· τὸ μὲν γὰρ «ἔξεις καὶ οὐχ ἔξεις» γυναῖκα καὶ οὐκέτι παρθένον ὑπετίθετο, τὸ δὲ «φονεύσεις» τὰς παρθενίους τρώσεις εἵκαζεν, ὅφ’ ὧν οὐκ ἀποθανεῖσθαι τὴν Χαρίκλειαν. (Hel. *Aeth.* 1.18.4.7-1.18.5.7)

[Thyamis, the brigand chief, is dreaming that he is back at Memphis, entering the temple of Isis:] “When he came into the priviest place of the shrine, the goddess met him and gave Chariclea into his hands and said: ‘Thyamis, I commit this maid to you; yet, having her you shall not have her; but you shall be unjust and kill the stranger. Yet she shall not be killed.’ After he had had this dream he was troubled in mind, casting this way and that way what it meant, that which was shown to him. At length, being weary of beating his brains he drew the solution thereof to his own will. The [*gar*] ‘You having shall not have her’, he interpreted ‘as a wife’ and not a maid any longer. By ‘you

shall kill’ he conjectured ‘thou shalt take her virginity’; by which Chariclea would not die.”

In (50) (which again does not quote all of the linguistic material under γάρ’s scope), γάρ introduces indirect speech syntactically dependent on ὁ λόγος (‘his argument’) . As such, the γάρ utterance describes the λόγος or ‘speech’ which Julian delivered and which was announced in the utterance preceding γάρ – the γάρ utterance could then be taken as containing information encapsulated in the cataphoric shell λόγος. However, the γάρ utterance could also be regarded as a simple Explanation – it explains why Gregory would think that Julian’s speech was clever (πάνσοφος). In other words, Gregory (and his audience) would be able to appraise Julian’s speech as being ‘clever’ based on the information in the utterance marked by γάρ. (51) may provide an even more obvious example of this dual analysis. The shell analysis would take τὴν ἐπίλυσιν (‘the solution’) as the shell and the γάρ utterance as containing information which fills in how this solution should be understood. On an Explanation analysis, on the other hand, the γάρ utterance would provide evidence for the assumption that Thyamis came up with a ‘solution’ (i.e., an interpretation) for his dream – on this view, the γάρ utterance would contribute information which would lead to the assumption that Thyamis had stumbled upon a possible interpretation for his dream.

I choose not to include examples such as (50) and (51) under the ‘shell’ heading – as stated at the beginning of this chapter, my aim is to focus on instances which cannot be explained under any existing analysis of γάρ, and both (50) and (51) can be explained by having recourse to epistemic causality.⁴² Although the analysis of both of these examples may benefit from a shell analysis, the more important point to take away from this discussion is that γάρ *can* be used in shell contexts, not how often it occurs there – the goal is to look at the contexts in which γάρ appears not for its own sake, but to help construct an analysis of γάρ’s meaning which is as unitary as possible.

4.2.3.6 Comparisons

I want to discuss one last context in which γάρ occurs, which is encountered predominantly in the *Hexaemeron*: comparisons. We already came across a comparison introduced by γάρ in the chapter on δέ (§3.2.3.3):

(52) Καὶ οὐχ ἃ μὲν ἔπραττεν ἤδη, τοιαῦτα καὶ οὕτω πόρρω βασιλικῆς εὐγενείας καὶ μεγαλοπρεπείας ἃ δὲ διενοεῖτο πράξειν, ἡμερώτερα τε καὶ βασιλικώτερα. Πολλοῦ μὲντ’ ἂν ἄξιον ἦν, εἰ μὴ πολὺ τῶν εἰρημένων ἀπανθρωπότερα. Ὡσπερ γὰρ δράκοντος

⁴² See also e.g. Greg. *Iul.* II.677.14; Hel. *Aeth.* 1.32.1.5 and 7.1.2.1.

κινουμένου φολίδες, αἱ μὲν ἤδη φρίσσουσιν, αἱ δὲ ἐπιφρίσσουσιν, αἱ δὲ μέλλουσι, τὰς δὲ οὐκ ἔστι μὴ κινήθῃναι, κἄν ἡρεμοῦσαι τέως τυγχάνωσιν· εἰ βούλει δὲ, ὥσπερ κεραυνῶ, τὰ μὲν ἤδη κατέχεται, τὰ δὲ προμελαίνεται, μέχρις ἂν καὶ ταῦτα ἐπέλθῃ τοῦ κακοῦ δυναστεύοντος, οὕτω κάκείνῳ τὰ μὲν ἤδη παρηνομεῖτο, τὰ δὲ ὑπεγράφετο ταῖς ἐλπίσι καὶ ταῖς καθ' ἡμῶν ἀπειλαῖς. (Greg. *Iul.* 628.35-629.8)

[Gregory is recounting the horrors wrought against the Christians by Julian. Yet he is also preparing his audience for the rest of his story:] “And it is not that the things he was already doing were of such a nature as I have described, and so far removed from the generosity and dignity of a sovereign, whilst those he was intending were more clement and more worthy of an emperor; it would have been good if they did not prove far more inhuman than the actions already stated. As [*gar*] when a great serpent moves along some of its scales stand up on end, others half way, others are about to be similarly erected, whilst it cannot but be that the rest will in their turn be set in motion, even though at the moment they appear motionless; or, if you will, as in a thunderstorm, part is already come down, part is blackening overhead, until this too shall come down when the mischief acquires the force sufficient. In the same way was it with him too – part of his wickedness had been already committed, part was being sketched out by his hopes and his threats against us.”

This example is not explanatory. It follows a pattern which is common in those contexts where γάρ occurs with a comparative clause (introduced by the subordinator ὥσπερ, ‘just as’): the γάρ utterance is preceded by an utterance which presents a certain state of affairs; the γάρ utterance itself is divided into two parts, the first of which (i.e., the comparative clause) draws a parallel with the previous state of affairs as the protasis, the second of which takes up the original state of affairs again by reformulating it without adding any new information (the apodosis). The pattern, then, can be schematized as follows:

(52') [Source assumption] [(comparison with source assumption) + (reformulation of source assumption)]_{γάρ}

(52) follows this pattern to a tee. Gregory first asserts that Julian's actions described up until now were far removed from the nobility and magnificence of an emperor (πόρρω βασιλικῆς εὐγενείας καὶ μεγαλοπρεπείας); and that the actions which followed these were even more inhuman (πολὺ τῶν εἰρημένων ἀπανθρωπότερα). The comparison in the γάρ utterance then compares this source assumption first to a dragon's scales, part of which have already been raised while the other part is still stirring (αἱ μὲν ἤδη φρίσσουσιν, αἱ δὲ ἐπιφρίσσουσιν, αἱ δὲ μέλλουσι); and then to a thunderstorm of which part is already coming down, while another part is still threatening in the black sky overhead (τὰ μὲν ἤδη κατέχεται, τὰ δὲ προμελαίνεται). The

apodosis of the γάρ utterance, finally, connects the comparison with the source assumption again (οὕτω κακείνω, ‘so too for him...’) – some of his transgressions had already been committed; others still remained. This latter part of the γάρ utterance does not provide any new information – it just repeats what was stated in the source utterance, where Gregory conveyed the same assumption (Julian did things unworthy of an emperor; but the things he planned to do were even worse).

This example is coincidentally also the only instance of γάρ used with a comparison in the invectives against Julian. Comparisons with γάρ also occur in the *Hexaemeron* but not in the *Aethiopica*, which may point to the fact that γάρ in this context (or maybe even comparisons in general) is liable to occur more frequently in argumentative discourse, where the speaker might feel the need to reformulate the point she is trying to make in terms which are more familiar to her audience. For now, however, this assumption must remain what it is – a hypothesis which awaits further research.

In the next two examples of the pattern in (52’), I have put both the source assumption and the reformulation of the source assumption in italics, while I have put the subordinator in bold to mark the beginning of the comparison (in these cases, ὥς is employed as a synonym of ὥσπερ):

(53) Διὰ τί καὶ ἐν τοῖς κατόπιν εἴρηται [...] Ὡφθη ξηρὰ, καὶ ἐκάλεσεν ὁ Θεὸς τὴν ξηρὰν, γῆν; Ὅτι ἡ μὲν ξηρὰ τὸ ἰδίωμά ἐστι, τὸ οἶονεὶ χαρακτηριστικὸν τῆς φύσεως τοῦ ὑποκειμένου, ἡ δὲ γῆ προσηγορία τίς ἐστι ψιλὴ τοῦ πράγματος. **Ὡς** γὰρ τὸ λογικὸν ἴδιόν ἐστι τοῦ ἀνθρώπου, ἡ δὲ ἄνθρωπος φωνὴ σημαντικὴ ἐστι τοῦ ζώου ᾧ ὑπάρχει τὸ ἴδιον· οὕτω καὶ τὸ ξηρὸν ἴδιόν ἐστι τῆς γῆς καὶ ἐξαίρετον. (Bas. Hex. IV.5.22-31)

[Basil is discussing the verse ‘And God called the dry land earth; and the gathering together of the waters He called seas’.] “Why does it also add thereafter [...] ‘The dry land appeared’, and why did God give it the name of earth? It is that *dryness is the property which appears to characterize the nature of the subject*, while the word earth is only its simple name. **Just as** [*gar*] reason is the distinctive faculty of man, and the word ‘man’ serves to designate the animal to which it belongs, so *dryness too is the special and peculiar quality of the earth.*”

(54) Εἰσὶ δὲ καὶ παρ’ ἡμῖν αἱ ἀρεταὶ κατὰ φύσιν, πρὸς ἃς ἡ οἰκείωσις τῆς ψυχῆς οὐκ ἐκ διδασκαλίας ἀνθρώπων, ἀλλ’ ἐξ αὐτῆς τῆς φύσεως ἐνυπάρχει. **Ὡς** γὰρ οὐδεὶς ἡμᾶς λόγος διδάσκει τὴν νόσον μισεῖν, ἀλλ’ αὐτόματον ἔχομεν τὴν πρὸς τὰ λυποῦντα διαβολήν· οὕτω καὶ τῇ ψυχῇ ἔστι τις ἀδίδακτος ἔκκλησις τοῦ κακοῦ. (Bas. Hex. IX.4.1-6)

[Basil argues that animals know instinctively what is good and what is bad for them.] “Virtues exist in us also by nature, and the soul has affinity with them not by education, but by nature herself. **Just as** [*gar*] no one needs lessons to hate illness, but by ourselves we repel what afflicts us, so *the soul too has no need of a master to teach us to avoid vice.*”

In (53), the source assumption distinguishes between the constitutive property of earth (dryness or ξηρά), and the name (γῆ) used to designate earth. In the comparison (which, as in (52), is under the scope of γάρ), a parallel is drawn with mankind, for which reason (τὸ λογικὸν) is the constitutive property and ‘man’ (ἄνθρωπος) is the appellation. In the apodosis of the γάρ utterance, the preceding assumption is recapped – dryness is what makes earth into earth, or, as Basil puts it, it is the ‘distinct’ (ἰδιόν) and ‘special’ (ἐξάριετον) quality of the earth.

(54) is very similar. The source assumption – the human soul is naturally inclined towards virtue – is reformulated in the latter part of the γάρ utterance, where Basil states that the soul rejects evil without needing a teacher (ἀδίδακτος). In between, we get the comparison introduced by ὥς: people do not need teaching to hate illness, but do so automatically (αὐτόματον).⁴³ In both (53) and (54), the reformulation of the source assumption is introduced by anaphoric οὕτω and focalizing καί (‘also’), which both point to strong parallels with a preceding assumption (in this case, the source assumption).

It should be emphasized here that both the comparison and the reformulation fall under γάρ’s scope. Given that Reformulations fall under elaborations following Figure 4.1, an elaborative analysis seems to be straightforward. However, the specific ways in which these comparison examples achieve relevance are different from more standard reformulations. This is testament to another problem with coherence approaches – their drive for categorization often leads coherence theorists to level off differences between different tokens of the same relation. Both (54) and (42), for instance, are reformulative – but surely the addition of a comparison in (54) should lead us to analyze the effects of this γάρ example along different lines? This is where RT offers a more fine-grained approach – compare this to the notion of elaboration as outlined in Figure 4.1, where the differences between different types of reformulation become a sidenote.

Of course, a coherence response could involve subsuming a Comparison relation under Reformulation. Yet I have found no coherence model which does so – Hobbs (1985: 15) proposes a Parallel relation (which would presumably cover comparisons, though this is unclear), but he does not include a Reformulation relation; for RST, the reverse is true. Hovy’s (1990: 131) hierarchy of coherence relations includes Comparison under the Comparative relation, not under Restatement. However, there is no way of looking at the γάρ examples discussed in this section without having recourse to both the notion of comparison *and* that of reformulation – both parts fall under γάρ’s scope.

⁴³ For other examples, see e.g. Bas. *Hex.* II.7.15, V.10.7 and IX.2.4. Note also the parallels with the correlative οἷον in (41) *supra* – the latter also relies on some sort of similarity with the preceding assumption.

RT offers an elegant solution by dint of its construal of interpretive use – both parts of these γάρ utterances can be analyzed unitarily as two forms of interpretive use.

RT has focused on comparisons in the form of similes (Walaszewska 2013; Gargani 2016) – in particular, on what distinguishes similes from similar types of figurative language (especially metaphor). The examples in this section do not constitute similes, however – similes “would be metaphors were it not for the word *like*” (as in ‘He’s like a wolf’; Walaszewska (2013: 323)) and, as such, give rise to ‘poetic effects’ (non-propositional, stylistic effects; e.g., the emotions evoked by the imagery of a wolf – see Pilkington (2000) and §4.2.5).⁴⁴ Consequently, they should be considered a specific subtype of comparisons. However, this means that there are also distinct similarities between the two in the ways they give rise to other, non-poetic effects.

Walaszewska (2013: 331) argues that similes involve the construction of a “superordinate category” where both the first and the second part of the simile are located – in the case of (54), for example, this superordinate category contains the assumption that ‘no one needs lessons to hate illness, but by ourselves we repel what afflicts us’ and ‘the soul too has no need of a master to teach us to avoid vice’. This leads the hearer to compare the two elements closely, with the second part of the simile functioning as “the most salient [...] member of the created category” and, hence, a “point of reference” (see also Gargani (2016) on ‘comparison-relevant content’). In the γάρ comparisons under consideration in this section, there is a double reformulation, as stated – the comparison with the source assumption and the recap of the source assumption both fall under γάρ’s scope. The comparison requires additional effort to process, and should, as such, give rise to corresponding positive cognitive effects. These effects lie in the ways these comparisons reinforce the source assumption. By indicating that there is a superordinate category in which both the comparison and the source assumption belong (the construction of which is emphasized by the recap of the source assumption), the speaker’s main point (the source assumption) is strengthened – although there is no independent reason to assume that ‘the soul has no need of a master to teach us to avoid vice’ and ‘we repel by ourselves what afflicts us’ are inferentially linked, the comparison invites the hearer to assume that this link exists. If the hearer accepts the comparison part of the γάρ utterance – which, in this case, does

⁴⁴ Example (52) probably gives rise to poetic effects in the sense that the imagery evoked (a thunderstorm, a dragon) gives rise to a range of emotions (most notably fear), which are then transplanted onto Julian – as such, the γάρ utterance in (52) may be considered to contain a simile (cf. also the analysis of the example in §3.2.3.3). However, I want to focus here on the similarities between *all* the comparisons in this section, and will hence discuss the non-poetic effects arising from their use – all three examples discussed in this section give rise to the effects I will describe here. See Gargani (2014: 245-265) for more on the difference between comparisons and similes.

indeed seem to be intuitively true –, the source assumption will become easier to accept as well. The comparison is aimed at constructing a superordinate category in which two different assumptions belong, and according to which the manifestness of one assumption leads to an increased manifestness of the other one. In that sense, comparisons can be manipulative, leading the hearer to look for similarities between assumptions which may be very different in other respects, and which may not actually have anything to do with each other on closer inspection (see also Part 3 of this dissertation, where I'll have more to say on the manipulative potential of γάρ utterances).

The point here is that comparisons give rise to effects which are not associated with the 'simple' reformulations in e.g. §4.2.3.4. Coherence approaches, and the model in Figure 4.1 in particular, have a tendency to look for similarities between different tokens of the same relation – while this is a productive approach in some respects (most notably in helping discern larger patterns between these different tokens), it can also lead to a diminished appreciation of the distinct effects associated with different manifestations of the same relation. This is where a more qualitative and cognitively-oriented approach can be beneficial, and where RT offers a way forward – helping us gauge how language can be used in ways which may seem similar on a superficial level, but which are distinctly different in the positive cognitive effects they yield.

At first glance, the elaboration hypothesis in Figure 4.1 seems to be an effective way of looking at γάρ's meaning. It has relatively broad scope; it differentiates between different subtypes of contexts which γάρ can mark; and it leaves room for border zones where several coherence relations may coincide – as we have seen, γάρ can mark explanatory Elaborations (or *vice versa*), or reformulative Explanations (or *vice versa*). Peek under the hood, however, and you notice that this hypothesis is missing some parts. Most notably, it cannot deal with non-subsidiary utterances (see §4.2.3.5), and it doesn't offer the tools to deal with the differences between simple Reformulations and the complex Reformulations exemplified by the comparisons in §4.2.3.6 – coherence theorists' itch for categorization can lead them to level off different subtypes of the same relation, and to lose sight of the distinct effects associated with these subtypes. Moreover, closer inspection of the elaborative subtypes reveals the limits of a coherence account. The notion of an Elaboration, in particular, has not been adequately defined, which results in a host of instances left out to dry – implicit premises and metadiscursive comments, specifically, cannot reasonably be subsumed under an account which takes an ill-defined notion of 'additional detail' to be central to an Elaboration's definition. As such, the variety of contexts in which γάρ occurs, demonstrates both how a coherence account may seem intuitively appealing, while also revealing the limits of its applicability, the fuzziness of its theoretical machinery, and its

lack of attention for fine-grained distinctions between different tokens of what is superficially the same phenomenon.

A more rigorous account of γάρ's meaning will have to improve on the elaboration one on several counts. For one, it will have to be able to deal with instances where γάρ is not subsidiary. Second, we will have to carve out a space for metadiscursive comments and implicit premises – these were found not to fall outside of the elaboration domain. Third, the concept of Elaboration will have to be dropped – notions such as 'additional detail' (or 'background', if 'Elaboration' is replaced with 'Background') have little to no theoretical or practical value. Fourth, although Figure 4.1 constitutes an intriguing (if incomplete) taxonomy of contexts in which γάρ can occur, it does not say anything about what γάρ *itself* contributes to the utterance. While the procedural rule to be proposed has to account for the fact that γάρ can appear in elaborative contexts, this does not mean that γάρ is elaborative itself – it can occur in non-elaborative contexts as well.

Finally, note that the hypothesis presented in Figure 4.1 is not only taxonomic, but also, as a result, non-unitary. I have not cashed out 'elaboration' in any theoretically interesting sense – I have simply used it as a hyperonym for a set of other coherence relations. In other words, if Figure 4.1 were taken to be an adequate account of γάρ's semantics, it would amount to saying that γάρ can mark several different coherence relations which are all connected to each other in the sense that they are 'elaborative'. This latter concept does not mean anything by itself – it is a cover term. The question is whether a non-unitary account is the only possibility, or whether, in light of Grice's Modified Occam's Razor, we can construct an acceptable unitary account of γάρ's semantics. A unitary procedural rule would have to be able to cover Explanations, different types of reformulation, shell constructions, implicit premises, metadiscursive comments and those utterances which provide the ill-defined 'additional detail' – in short, all of the contexts in which γάρ occurs across my corpus. While this may seem like a tall (or even impossible) task, I do believe that a unitary analysis of γάρ is possible (and preferable) – but the notion of elaboration as it has been maintained throughout this chapter is simply not up to this task. In the next section, I attempt to assemble a plausible unitary account of γάρ's meaning.

4.2.4 Tying everything together

In the previous section, I discussed the different contexts in which γάρ appears in my corpus. Now, I will try to induce which conclusions we can draw from this data about γάρ's meaning. What connects all of these contexts, I will argue, is that γάρ utterances increase the relevance of the preceding utterance by making available contextual

assumptions necessary for deriving the speaker-intended positive cognitive effects associated with that utterance.

One of the most important contributions of relevance theory to the theory of utterance understanding is the insight that a large part of any hearer's cognitive resources is tied up with establishing the contextual assumptions underlying the correct interpretation of the speaker's utterance. On the RT approach, relevance "is treated as a given and context [...] as a variable", which means that processing effort has to be expended in order to establish the contextual background necessary to derive the speaker-intended interpretation of an utterance (Sperber & Wilson 1995²: 142; also Moeschler 1995: 30-31; Ariel 1988: 568; Maillat 2013: 193). This, as we have seen, gives rise to the frame problem – how do we select the speaker-intended contextual assumptions out of all the assumptions which are manifest to us at any given moment (see Assimakopoulos 2003; Apperly 2011: 9)? My point in this section will be that γάρ, in marking the upcoming utterance as contributing crucial context for deriving the speaker-intended interpretation of the preceding (or, in some rare cases, following) utterance, encodes information which is aimed at alleviating this problem. Utterances marked by γάρ 'lock down' the interpretation of this other utterance by highlighting certain assumptions or shutting down certain inferential paths, limiting potentially unnecessary effort which she assumes would be expended by the hearer otherwise, or increasing the salience of other assumptions.⁴⁵

The upshot of this is that γάρ utterances cannot be considered to be optimally relevant "in their own right", to use Blakemore's (1992: 174) turn of phrase. In other words, a γάρ utterance does not produce enough positive cognitive effects on its own, but achieves relevance in how it helps another utterance to be processed in an optimally relevant fashion (ibid.; see also Moeschler 1993: 167-168; De Saussure 2013: 182).⁴⁶ This explains why the subsidiarity hypothesis seems so reasonable at first glance – if an utterance does not achieve relevance on its own, it will often come across as less important than the preceding utterance. However, the crucial addition here is that the

⁴⁵ Many DMs, of course, are aimed at alleviating the frame problem – δέ, for instance, greases the wheels of the search for the speaker-intended contextual assumptions. However, γάρ is aimed *specifically* at providing the speaker-intended contextual assumptions, and hence grounding the preceding assumption in the right context – δέ, on the other hand, is aimed at separating assumptions, while also maintaining contextual continuity. Whereas γάρ indicates that speaker-intended contextual assumptions for another utterance will follow, δέ indicates that the upcoming utterance is a separate assumption relying on preceding assumptions for its interpretation. In that sense, it is perhaps more accurate to say that DMs limit processing effort in different ways – and since selecting the right contextual assumptions is one of the most effort-intensive and difficult parts of utterance interpretation, it is not surprising that many DMs will be aimed at helping that process in some way. The point is that γάρ does so in its own specific way.

⁴⁶ Cf. also Blakemore (1991: 206-207) on performatives, which serve a similar function.

γάρ utterance leads to the optimally relevant interpretation of another utterance. As such, it does lead to positive cognitive effects which – the speaker assumes – would not arise without the γάρ utterance, and hence leads to optimal relevance in a global sense. With γάρ utterances, optimal relevance is maintained over a longer stretch of discourse – that is, a stretch of discourse including the preceding utterance and the utterance(s) under γάρ’s scope (see Blakemore (1992: 174); see also Moeschler (1993: 167-168) on French *parce que*). Shell contexts are prime examples here:

(48) τί οὐχὶ καὶ μηχανὴν τινα πρὸς περιγραφὴν τῶν φοβούντων ἐπινοεῖς; δεινὴ δέ τις ἔοικας εἶναι σοφιστεῦσαι κατὰ τῶν ἐπιχειρούντων διαδύσεις τε καὶ ὑπερθέσεις.» Ἀνείθη πρὸς ταῦτα μικρὸν ἢ Χαρίκλεια καὶ «Εἰ μὲν ἀληθεύεις» εἶπεν «ἢ παιδιὰν με πεποίησαι, παρείσθω τὸ παρόν· ἐγὼ δὲ τέχνην ἅμα τῷ Θεαγένει μὲν καὶ πρότερον ἐπιχειρηθεῖσαν ὑπὸ δὲ τῆς τότε τύχης διακοπεῖσαν εἰσηγήσομαι καὶ νῦν ἐπ’ ἀμείνοσι ταῖς τύχαις· τῆς γὰρ νήσου τῆς βουκολικῆς ἀποδρᾶναι διανοηθεῖσιν ἐδόκει τὴν ἐσθῆτα μεταμφιασμένους ἐς τὸ λυπρότατον καὶ πτωχοῖς ἑαυτοὺς ἀπεικάσαντας οὕτως ἐπιμίγνυσθαι κώμαις τε καὶ πόλεσιν. (Hel. Aeth. 6.9.7.5-6.10.1.9)

[Chariclea is afraid that Thyamis will once again desire her when she returns to see him. Calasiris is trying to assuage her fears:] “Why cannot you invent some device to elude that which you so dread? You are very crafty, it seems, and skilful to make shifts, and delays against them that seek to have you.’ Chariclea was somewhat merry at these words and answered: ‘Whether you say this in earnest or in jest, let it pass for this time. But I will tell you the way that Theagenes and I devised – although fortune would not let us put it into practise, it may now suffer better luck. When [*gar*] we planned to escape from the herdsmen’s island, we decided to change our apparel, and wander about in the villages and towns like ragged and dirty beggars.”

The γάρ utterance ensures that the preceding utterance is optimally relevant – without its addition, the preceding utterance would be incomplete (that is, Chariclea would not provide any information about the τέχνην or ‘plan’ she and Theagenes came up with). At the same time, the γάρ utterance only becomes optimally relevant in light of the shell provided in the previous utterance – that is, it is only when the speaker interprets it as the plan Chariclea and Theagenes came up with, that it will yield positive cognitive effects as the speaker intended. Put differently, the shell context as a whole ([shell + encapsulated info marked by γάρ]) achieves optimal relevance.

In this way, γάρ can be considered to be ‘manipulative’. Maillat & Oswald (2009: 362; also Maillat 2013) have defined manipulation as “a form of cognitive constraint on the selection of contextual assumptions”. Disregarding the negative connotations associated with the term, γάρ is ‘manipulative’ in this sense – except for the fact that it is not cognitive in nature, but lexical. It signals to the speaker’s audience that the upcoming utterance will constrain the interpretation of the preceding utterance by providing (a)

contextual assumption(s) which will make that utterance easier to understand or accept (see also Maillat 2013: 197). As such, γάρ utterances increase the overall relevance of the discourse by ‘manipulating’ the hearer. In some cases (like (48)), this manipulation is extensive; in other instances, it will amount to some subtle fine-tuning:

(31) Τίς ὁ τοῖς γυψὶ προαπαγγέλλων τῶν ἀνθρώπων τὸν θάνατον, ὅταν κατ’ ἀλλήλων ἐπιστρατεύσωσιν; Ἴδοις γὰρ ἂν μυρίας ἀγέλας γυπῶν τοῖς στρατοπέδοις παρεπομένας, ἐκ τῆς τῶν ὅπλων παρασκευῆς τεκμαιρομένων τὴν ἔκβασιν. (Bas. Hex. VIII.7.50-3)

[Basil is giving examples of how God has blessed winged creatures with everything they need to survive.] “Who announces to the vultures the carnage of men, when they march in battle array against one another? You may see [gar] myriad flocks of vultures following army camps and calculating the outcome of warlike preparations.”

By providing an implicit premise of the preceding utterance, the γάρ utterance in (31) provides more information about the situation referred to in the utterance preceding it. It does not present new information as such, but ensures that Basil’s audience understands the preceding utterance as he intends – vultures follow armies so that they can feast on the corpses left behind by battle. As such, the γάρ utterance is not optimally relevant in its own right, but it does ensure that the preceding utterance is processed in the right way, and hence leads to positive cognitive effects by indicating how the previous utterance is to be understood – it makes available contextual assumptions which increase the chances that the preceding utterance will be processed smoothly.

(55) Καίτοι γε ἱκανῶς ἀπολελόγημαι, καὶ δι’ αὐτῶν ὧν ἐγκέκληκα, εἴ τι τῇ κατηγορίᾳ τὸν νοῦν προσέχετε· κἀνταῦθα μόνον ἢ κατηγορία τὴν ἄφεσιν ἔχει· χρηστότητα γὰρ εἰπὼν, τὴν ἀπολογία ἐδήλωσα. Τίς γὰρ οὐκ οἶδε καὶ τῶν μετρίως ἐκεῖνον ἐπισταμένων, ὅτι ἔνεκα μὲν εὐσεβείας καὶ τοῦ περὶ ἡμᾶς φίλτρου, καὶ τοῦ βούλεσθαι πᾶν ἡμῖν ἀγαθόν, μὴ ὅτι ἐκεῖνον παρείδεν ἂν, ἢ γένους ὅλου τιμὴν, ἢ προσθήκην τῆς βασιλείας, ἀλλὰ καὶ αὐτῆς τῆς βασιλείας, καὶ πάντων τῶν ὄντων, καὶ τῆς ψυχῆς αὐτῆς, ἥς οὐδὲν οὐδενὶ τιμιώτερον, τὴν ἡμετέραν ἀσφάλειάν τε καὶ σωτηρίαν οὐκ ἂν χαλεπῶς ἠλλάξατο; (Greg. Iul. I.561.35-47)

[Gregory is accusing Constantius of putting the Roman empire into the hands of Julian. As Constantius is quite a popular figure with Christians, Gregory feels the need to qualify his accusation:] “Yet I have sufficiently cleared myself even by the terms of my accusation, if you have only paid a little attention to the sense of my accusation. And in this case only the accusation contains in itself the acquittal, [gar] by talking of his benignity, I let you see the defence. Who is not assured, even of those but somewhat acquainted with that prince, that – because of his piety and his concern for us, and his determination that everything would be good for us – that not merely would he have

passed over not only that man [i.e., Constantius, SZ], or the glory of his entire house, or the maintenance of his own power, but that he also would have, without it being painful, have given the imperial power itself, and all his possessions, and his very soul, than which nothing is more valuable to any man, in exchange for our security and deliverance?”

In this example, Gregory states that his accusation of Constantius (ἡ κατηγορία) also contains his absolution (τὴν ἄφεσιν). As this seems to be somewhat contradictory, he adds the γάρ utterance to explain his thinking – by designating Constantius as being ‘benign’, Gregory indicates that he thinks the former emperor is, in fact, a great man, but that he erred in bestowing the imperial crown on Julian. Indeed, in his preceding discussion, Gregory took care to emphasize Constantius’ qualities, and paint his decision to designate Julian his successor as an unfortunate mistake. In the γάρ utterance in (55), then, Gregory underlines this fact – his accusation was contained within his praise of Constantius as a great ruler, and so his accusation also contained Constantius’ acquittal. The γάρ utterance is added by Gregory as insurance, increasing the chances that the preceding utterance will be interpreted as he intended it to and, hence, increasing the chances that it is interpreted in an optimally relevant fashion.⁴⁷

(56) Ἦδη γοῦν τῶν περὶ τὸν Εὐφράτην πλησιαζόντων καὶ ἐπιδραττομένων καὶ ἀπὸ τῶν ξύλων πρὸς οἷς τὰ δεσμὰ κατακέκλειστο ὑπεκλυόντων ὁ Θεαγένης «Εὖγε ἡ ἀλάστωρ Ἀρσάκη» ἀνεβόησεν «ὅτι νυκτὶ καὶ ζόφῳ τὰς ἑαυτῆς ἀθεμίτους πράξεις ἐπικρύπτειν οἶεται. Δεινὸς δὲ ὁ τῆς δίκης ὀφθαλμὸς ἐλέγχῳ καὶ τὰ ἀμήνυτα κρύφια καὶ ἀθέμιτα φωτίζειν. Ἄλλ’ ὑμεῖς τὰ προστεταγμένα πράττετε καὶ εἴτε πῦρ εἴτε ὕδωρ εἴτε ξίφος ὥριται καθ’ ἡμῶν τὸν αὐτὸν ἅμα καὶ ἓνα θάνατον ἀμφοτέροις χαρίσασθε.» Συμπαρεκάλει δὲ τὰ αὐτὰ καὶ ἡ Χαρίκλεια. Ἐπιδακρύσαντες οὖν οἱ εὐνοῦχοι, συνέσαν γὰρ ἡρέμα τῶν λεγομένων, αὐτοῖς δεσμοῖς ὑπεξῆγον. (Hel. Aeth. 8.13.4.1-8.13.5.6)

[Bagoas and Euphrates arrive at the cell where Theagenes and Chariclea are being held. They think they have come to kill them:] “When the eunuchs, including Euphrates, came near and set their hands to take away the stocks whereunto their chains were tied, Theagenes cried out: ‘O goodly Arsace, she thinks to hide her mischievous deeds of wickedness in night and darkness – but the eye of justice is awful in its reprisal, and

⁴⁷ Note also the γάρ utterance which follows immediately – this one presents more details about Constantius’ ‘benignity’, and hence anchors the preceding assumption against a discussion of Constantius’ benignity. Gregory wants to make sure that his audience follows his line of thinking – Constantius was sometimes misguided, but a pious man at heart; Julian, on the other hand, was just evil at heart. The Τίς γὰρ οὐκ οἶδε... utterance, then, is meant to hammer home the point that Constantius really was a good guy, and that his benignity should be the main focus of attention here – not Gregory’s ‘accusation’.

brings to light all hidden, wicked acts which have not been denounced. Do you as you are commanded, and whether it be fire, water or sword that be appointed for us, let us both together and at one time have the same manner of death.’ Chariclea made the same petition as well. Whereat the eunuchs wept — they understood [*gar*] part of what they said — and brought them forth chains and all.”

Here, the γάρ utterance seeks to allay any doubts Heliodorus’ audience may have about the feasibility of the preceding utterance. They know that Theagenes only speaks Greek, and can assume that the eunuchs probably do not – so how could they be weeping (ἐπιδακρύσαντες) here? By adding the γάρ utterance, Heliodorus blocks the assumption that the interlocutors cannot understand each other – the eunuchs can (at least partly) make out what Theagenes is saying. In that sense, the γάρ utterance provides an assumption necessary for understanding the preceding utterance – by dint of the γάρ utterance, the preceding utterance begins to make sense. What γάρ does is indicate that the upcoming utterance should be taken to ease the process of understanding the preceding utterance by providing the audience with a contextual assumption which will lead to an optimally relevant interpretation of that preceding utterance. In this case, Heliodorus assumed that his audience would have trouble understanding how a Greek and a Persian would understand each other, and so added the γάρ utterance to clear this up.

Γάρ relies heavily on the speaker’s mindreading capabilities – she will only make explicit those assumptions which she thinks will be relevant for her audience. Assumptions which are too obvious will remain implicit – they will not produce the requisite positive cognitive effects in line with the processing effort entailed by the interpretation process. On the other hand, assumptions which the speaker feels to be crucial and which may not seem too clear-cut will be made explicit (and can be marked by γάρ). Instead of subsidiarity or some sort of causality, γάρ is all about marking utterances which lead the audience to an optimally relevant interpretation of another utterance, by indicating and constraining which contextual assumptions should be brought to bear on the interpretation process.

However, γάρ can sometimes be proleptic – that is, it can point forward instead of backwards⁴⁸:

(57) Φασί τοι διὰ ταῦτα καὶ τὸν τηνικαῦτα ὕπαρχον (γενέσθαι γὰρ ἄνδρα Ἑλλήνα μὲν τὴν θρησκείαν, τὸν τρόπον δὲ ὑπὲρ Ἑλλήνα, καὶ κατὰ τοὺς ἀρίστους τῶν πάλαι καὶ νῦν

⁴⁸ Denniston (1954²) already pointed to this use of γάρ, which he calls ‘anticipatory’ – see §4.1.1.

ἐπαινουμένων), ἐκεῖνο πρὸς τὸν βασιλέα μετὰ παρρησίας εἰπεῖν, οὐ φέροντα τὸ πολυειδὲς τῆς τοῦ ἀνδρὸς αἰκίας καὶ καρτερίας [...]. (Greg. *Iul.* I.621.40-46)

[Gregory is recounting the horrors wrought on the bishop Marcus.] “It is reported that, by dint of these actions, the then Prefect (he was [*gar*] a person, though a heathen in religion, yet superior to a heathen, and among the best – both those of old and those of reputation in the present day) spoke thus with boldness to the emperor, because he could not consent to the varied tortures inflicted on the old man, and his fortitude under them: [...]”

(58) Ταῦτα ἐκεῖνος μὲν ἔλεγεν, ἡ δέ (ἔστι γὰρ χρῆμα σοφώτατον) καιρὸν διαθέσθαι δραστήριος ἅμα δέ τι καὶ τῆς ἐμῆς ὑποθήκης ἀνύουσα, τὸ κατηφὲς ἐκ τῶν περιεστηκότων τοῦ βλέμματος ἀπεσκευασμένη καὶ πρὸς τὸ ἐπαγωγότερον ἐκβιασασμένη «Ἀλλὰ θεοῖς μὲν» ἔφη «χάρις τοῖς τὰ φιλάνθρωπότερα περὶ ἡμῶν ἐπὶ νοῦν τὸν σὸν ἄγουσιν. (Hel. *Aeth.* 5.26.2.1-7)

[The ship on which Theagenes and Chariclea (and Calasiris) are traveling, has been captured by the pirate Trachinus. He explains that he did so to get ahold of Chariclea, with whom he is in love. Chariclea reacts:] “At these words of his she (she was [*gar*] as clever a creature as ever lived), with her quickness in turning a situation to the best account, and also getting some advantage from my [i.e., Calasiris’, SZ] promptings, threw off the downcast look caused by her present predicament and, forcing herself to show a more engaging expression, said: ‘Ah, thanks be to the gods for inclining your mind to humaner intentions towards us!’”

In both cases, the γάρ utterance provides contextual assumptions which will be relevant for arriving at the speaker-intended interpretation of the upcoming utterance. In (57), Gregory will be talking about how the prefect went against the emperor’s preferences with regards to the treatment of the bishop Marcus, while, in (58), the post-γάρ utterance shows how Chariclea attempts to get Trachinus on her side. The γάρ utterances provide a frame for processing the next utterances – in (57), Gregory indicates that this prefect is an upstanding heathen; in (58), Heliodorus (via Calasiris) indicates that what follows will be an example of Chariclea’s cleverness.⁴⁹ In both instances, the γάρ utterance colours the audience’s expectations about the upcoming utterance – in (57), the audience will now expect the prefect to do something

⁴⁹ See also e.g. Kroon (1989: 234) on Latin *nam*, which can perform the same function.

upstanding, while, in (58), the audience will now expect Chariclea to think of a clever way to turn her present predicament to her advantage.⁵⁰

Both γάρ utterances provide valuable context which will make the upcoming utterance easier to grasp and which precludes the audience from going down the wrong interpretive path. In (57), Gregory's audience may assume that a prefect appointed by Julian would be a heathen (correct), and hence that he would revel in the mob's vicious treatment of Marcus (incorrect). By inserting the γάρ utterance, Gregory closes off this second interpretive path and points to the correct contextual assumption, which leads the audience in the right interpretive direction – they can now assume that the prefect will do something positive for Marcus. As such, processing effort for the upcoming utterance is decreased, as the audience will start its interpretation process with the right contextual frame (i.e., with the right expectations). The same is true for (58). Chariclea's reaction will be processed in the speaker-intended context by inserting the γάρ utterance – the audience can now expect her to concoct a clever plan which will save Theagenes, Calasiris and herself from Trachinus and his pirate crew. Other possible contextual frames are closed off as well – for example, the audience will not enter the upcoming utterance with the idea that Chariclea is scared or that she will simply acquiesce to Trachinus' wishes. In sum, the most important thing to note here is that γάρ's function remains the same regardless of the position of the utterance which it marks.⁵¹

The broad function outlined here for γάρ would allow it to occur across the many and varied contexts we have come across in this chapter. Across all these contexts, however, its function is one and the same – in line with Blakemore's (1992; see also Unger 2011: 110) division between utterances which achieve relevance in their own right and utterances which help another utterance to be processed in an optimally relevant way, γάρ utterances should be regarded as providing assumptions which help other utterances yield the intended positive cognitive effects:

- Implicit premises fill in valuable background information which may have been missed or hazy to the audience – this will lead to a clearer understanding of the preceding utterance. As such, the speaker can increase the chances of her earlier utterance achieving the intended positive cognitive effects, and hence achieving optimal relevance.

⁵⁰ Note here also the way in which the utterance preceding γάρ is formulated – ταῦτα ἐκεῖνος μὲν ἔλεγεν, with ἡ δέ correlating with ἐκεῖνος μὲν, and hence indicating that Chariclea will here not just react to her present predicament, but to Trachinus' words in particular.

⁵¹ The proleptic use of γάρ is common in Herodotus' *Histories* (see Smyth 1920: 639-640; Denniston 1954²: 68-73). For examples, see e.g. *Histories* 1.8.7, 1.8.9 and 2.147.6.

- With metadiscursive comments, the speaker can close off certain inferential paths. In (35), for instance, the speaker may have expected his audience to regard Marcus' flesh as 'wretched'. By explicitly indicating that he cannot regard as such, but that he sees it as being 'blessed', he emphasizes that the usual way of looking at scenes like this is not relevant here, and that a contextual assumption which might have been activated here ('people who are physically tortured have wretched flesh' or something to that effect) should not be activated. Consequently, Gregory's designation of Marcus' flesh as being 'blessed' is set against all other cases of torture (under which the victim's flesh would be called 'wretched'), and the notion of suffering for God as a pious and beautiful concept is implied. As such, the γάρ utterance brings out positive cognitive effects related to the preceding utterance which might not have arisen without its addition. Γάρ can also mark utterances which indicate the provenance of a quote (see (37)) – the speaker can tie in the communicated assumptions with an authoritative source, for instance. The aim with this type of utterance may simply be to indicate that the preceding utterance is an example of interpretive use, which will, in turn, help the hearer interpret that utterance correctly.

- Exemplifications clear up concepts or utterances which might not have been particularly lucid at first glance, and hence increase their salience. In (40), for example, Basil argues that 'the contrary cannot proceed from its contrary'. In the γάρ utterance which follows, he provides examples of this thesis – 'life does not engender death', for instance, or 'sickness is not the maker of health' –, which provide support for the preceding proposition. In that sense, the γάρ utterance increases the chances of the preceding utterance producing the speaker-intended positive cognitive effects by providing examples of its soundness. Put differently: if you didn't believe Basil before the γάρ utterance, the γάρ utterance will probably convince you that the preceding assumption is true – as a result, it will produce positive cognitive effects.

- Reformulations, as outlined in the previous chapter, are all about interpretive resemblance – the reformulation interpretively resembles the source utterance, with the speaker aiming to clarify the preceding utterance (as in e.g. (42)) or to point to implicatures connected to the preceding utterance (as in e.g. (44)). In both cases, the speaker wants to make sure that her audience derives the intended positive cognitive effects from the preceding utterance.

- Shell contexts provide contextual assumptions which fill out a concept which had been vague before the addition of the γάρ utterance. Again, the point of the γάρ utterance is to pin down a concept in another utterance so that that preceding utterance can achieve the speaker-intended positive cognitive effects. By doing so, the speaker can optimize relevance over a longer stretch of discourse by chopping up and spreading out information across different utterances as well.

- Comparisons are akin to reformulations in that they compare the preceding utterance to an assumption which is intended to make the original assumption easier to

understand. They can also increase the salience of the source assumption by pointing to another assumption which is familiar to the hearer – by placing the source assumption in that context and indicating the similarities between the two, the source assumption can be strengthened. In (53), for instance, Basil distinguishes between the primary characteristic of an entity and its designation – for earth, dryness is the primary characteristic, and ‘earth’ is the designation. He then proceeds to use the γάρ utterance to draw a parallel with reason, which is the primary characteristic of man, with ‘man’ being the designation. The comparison is meant to elucidate how the distinction in the pre-γάρ utterance should be drawn. Note also that the γάρ comparisons include a recapitulation of the source assumption in the apodosis, demonstrating that the comparison is intended to produce positive cognitive effects in relation to the previous utterance.

- Explanations, finally, also ‘fine-tune’ the interpretation process for the preceding utterance. In (6), Basil states that the heavens had not yet been crowned by the sun, moon and stars – γάρ ‘these bodies were not yet created’. This latter contextual assumption is meant to anchor the preceding one in the sense that it will ensure the audience’s understanding, or increase the chances that they believe the preceding assumption – in that sense, explanations increase the salience of another assumption by providing support for it. The audience may have surmised that the heavenly bodies had just not yet been created, given how Basil formulated the preceding utterance (οὐκ ἐξείργαστο οὐπώ, ‘the heavens had not yet been created’), but this can only be confirmed once the γάρ utterance has been processed. The γάρ utterance, then, pre-emptly a question which may have been raised by the preceding utterance (where were the heavenly bodies at this time?)⁵² and provides an answer which Basil assumes to be relevant for his audience – another example of the mindreading involved in γάρ utterances. In the same vein, an Elaboration only provides ‘additional detail’ in the sense that the γάρ utterance makes available contextual assumptions which help the hearer understand another utterance.

The metaphor of an anchor is particularly apt for γάρ. It indicates that the γάρ utterance (the anchor) ‘locks down’ the preceding utterance (the ship) by grounding it in a particular (set of) contextual assumption(s). An anchor prevents a ship from swaying or drifting, just as a γάρ utterance prevents another utterance from being

⁵² See Blakemore (2001a: 108) and Carston (1993: 38), who argue that humans are always looking for answers and explanations, and, as such, always asking ‘Why?’. In that sense, the assumption that the γάρ utterance here anticipates a ‘Why’ question does not seem too farfetched (cf. also Mak & Sanders 2013: 1435; Carston 2002a: 241). See also Sicking (1993), who also paints γάρ’s function in terms of an implicit question – his account was discussed in §4.1.2.

interpreted against the wrong set of contextual assumptions – more positively (although the metaphor breaks down somewhat here), just as a γάρ utterance indicates which contextual assumptions are necessary to derive the speaker-intended positive cognitive effects from another utterance. As such, γάρ only exists in light of something else – that is, another utterance (or, more to the point, the assumption(s) that utterance communicates).

This, of course, explains its status as a connective. However, γάρ's function should not be painted in terms of a particular coherence relation, or even a particular set of coherence relations. As Blakemore (1998: 49) puts it, for every utterance “the question is not how is this utterance connected to the previous one, but rather how [...] this utterance achieve[s] relevance”. In the case of a γάρ segment, the utterance achieves positive cognitive effects by constraining the way another utterance achieves positive cognitive effects, indicating which contextual assumptions are relevant for the interpretation process. In that sense, the coherence relations which have traditionally been associated with γάρ's meaning (Explanation, Elaboration, Cause, etc.) are only derivatively connected to its primary function.

Following the discussion in this chapter, I take γάρ to encode the following procedural rule:

(59) Take the upcoming utterance to achieve suboptimal relevance in the sense that it provides a (set of) contextual assumption(s) which the speaker feels to be necessary for deriving the intended positive cognitive effects from the assumption(s) to which the γάρ utterance is connected.

A major, and crucial difference between the procedural rule here and the elaboration or subsidiarity hypothesis is that the subsidiary component (in RT terms, ‘suboptimal relevance’) is cashed out differently in (59) – indeed, the fact that the γάρ utterance may lead to positive cognitive effects which might not have arisen otherwise is testament to its potential significance. In other words, while the γάρ utterance on its own may be suboptimal (‘subsidiary’), its function should be considered in light of the (usually) preceding utterance, of which it increases the relevance – overall relevance is increased, even if the γάρ utterance itself is only suboptimally relevant.

The somewhat belaboured way of putting the last part of the rule in (59) (‘the assumption(s) to which the γάρ utterance is connected’) is due to the fact that γάρ is not always placed after the assumption which it elaborates on – naturally, accuracy demands that we take proleptic examples like (57) and (58) into account, and that the definition refer to *all* instances of γάρ. Indeed, the whole point of the definition in (59) is

to provide a unitary analysis of γάρ's meaning. I think that the definition of γάρ in (59) can deal with more instances than existing proposals, and that it can do so more parsimoniously and in a cognitively more realistic way.⁵³ Yet, unavoidably, there are still some perplexing examples which cannot be analyzed under any account (including my own) – I will discuss some of these in §4.2.5.

The question remains as to why so many accounts have based their analysis of γάρ around the notion of causality. Part of the answer here lies in what Mak and Sanders (2013: 1435) have called the 'causal tendency' – people have a penchant for interpreting utterances causally "[e]ven when the connective is underspecified with respect to causality" (see also Blakemore 2001a: 108; Carston 2002a: 241; footnote 52 *supra*). A DM like γάρ, which does not point to causality as such but will often be encountered in contexts which are causal in some sense, is hence liable to be considered 'causal' even when this is not part of its semantics. This misconception may lie behind the ubiquitous causality-based accounts of γάρ.

Moreover, it is not clear why we should consider γάρ a 'causal' DM when it could also be considered, for instance, a reformulation marker. Fløttum (1994: 119–120) sees reformulation as a broad category which includes several functions – she argues that the French reformulation marker *c'est-à-dire*, for example, can mark e.g. Explanations and Exemplifications. If γάρ can mark reformulations, Explanations and Exemplifications – as I have argued in this chapter –, it might be taken to be closer to a reformulation marker like *c'est-à-dire* than a causal DM like *for*. The implicit premises and metadiscursive comments with which γάρ occurs, however, cannot be so easily subsumed under a reformulation framework either. The point here is that γάρ resists a

⁵³ It can also deal with (1) and (2) in a unitary way – which would be challenging for a elaboration/subsidiarity account. In (1), Menelaus picks up on Agamemnon's command, asking him to specify how it should be carried out (he goes on to ask whether he should stay with Nestor until Agamemnon arrives or whether he should return to Agamemnon as soon as possible). In (2), the chorus confirms Oedipus' suspicions that they have seen the herdsman before – in fact, they actually *know* the guy. In both cases, the speaker uses γάρ to attach his utterance to the one uttered just before by his interlocutor. This attachment takes on a different form in both cases (in (1), we get a specification; in (2), a confirmation), but in both cases the γάρ utterance only achieves relevance in light of the preceding utterance, the goal being to yield speaker-intended positive cognitive effects from the latter – in (1), to clear up how Agamemnon's command should be implemented exactly; in (2), to help Oedipus get the desired answer to his question. Note, for (2), the use of the *potentialis* προὔχοις ἄν ('you could have an advantage'), along with τάχα ('perhaps') and the DM που, which signals that the speaker "is not sure whether or not the proposition is true" (Wakker 1997: 229). As such, Oedipus goes out of his way to communicate that he is not sure about what he's saying, and is inviting a response from the addressee.

To paint (1) and (2) in terms of coherence relations or subsidiarity is to miss the point – I am unaware of any coherence relation which would apply to the γάρ utterance in (1), while the γάρ utterance in (2) amounts to the speaker's entire turn, which would then be subsidiary entirely (not to mention that this utterance is not subsidiary to *Oedipus*, of course, who is looking for an answer to his question).

coherence-based approach – whether it be based around causality, reformulation or elaboration. In the same vein, there is no evident counterpart for γάρ in any language I have read about for this dissertation. Γάρ is similar to English *well*, but only in the sense that both occur across many different contexts and that their meaning is elusive (Blakemore 2002: 130; also De Klerk 2005: 1187). Both are ‘messy’, then, in that there is no readily available way of construing γάρ’s (or *well*’s) function and meaning in terms of coherence relations – instead, it functions as a constraint on the relevance of the upcoming utterance.⁵⁴ As suggested by (59), this means that γάρ indicates that its utterance will not achieve optimal relevance unless it is seen in light of another one. At the same time, the speaker assumes that this latter utterance would not achieve its intended positive cognitive effects without the addition of the γάρ utterance. The observation that DMs can occur in varied contexts which are not easily captured in straightforward terms should not come as a surprise⁵⁵ – their function is constrained by the way in which they can help hearers understand the speaker, not by how they can help the discourse achieve coherence (see also Rouchota 1998: 30).

The inherent ‘messiness’ of γάρ – i.e., the fact that it is difficult to analyze properly under a category-based framework – is particularly obvious in two confusing collocations with other DMs – ἀλλὰ γάρ and γάρ οὖν. In the first case, which only occurs in the *Hexaemeron* in my corpus, γάρ combines with a DM which points to sharp discontinuity, which would seem to preclude the tight connection with the previous utterance which is typical of any γάρ utterance. The second case (which occurs only twice across my corpus) is problematic for coherence approaches, on which γάρ encodes some sort of subsidiarity and οὖν the transition from a subsidiary utterance to a more central one. Bakker (2009) has attempted to provide a compositional solution to this problem, but I think a non-compositional analysis along the lines of the procedural rule in (59) is preferable. This analysis will have to wait, however, until the next chapter, when I have discussed οὖν’s semantics (§5.2.6). Here, I will attempt to demonstrate that the ἀλλὰ γάρ cases, which are difficult to subsume under the procedural rule in (59) (but impossible to subsume under other existing analyses of γάρ), once again point to the fact that γάρ’s meaning cannot be described in terms of coherence.

⁵⁴ Blakemore (2002: 147) argues that *well* functions as a constraint on relevance as well, encoding “the speaker’s guarantee that his utterance yields cognitive effects”.

⁵⁵ See e.g. Aijmer (2002: 3), who paints this in terms of “multifunctionality”; also Wierzbicka (1986: 520-521).

4.2.5 A loose end: ἀλλὰ γάρ

The collocation ἀλλὰ γάρ occurs eight times in Basil's Hexaemeron. All eight cases are clearly metadiscursive, six of them making explicit mention of Basil's λόγος or 'discourse'.⁵⁶

(60) ΧΘὲς τοίνυν, καθόσον ἦν δυνατόν, τῇ περὶ τὰ λόγια τοῦ Θεοῦ διατριβῇ τὰς ψυχὰς ὑμῶν εὐφράναντες, πάλιν ἀπηντήσαμεν σήμερον ἐν δευτέρᾳ ἡμέρᾳ, τῶν τῆς δευτέρας ἡμέρας ἔργων τὰ θαύματα κατοψόμενοι. Ἀλλὰ γὰρ οὐ λέληθέ με, ὅτι πολλοὶ τεχνῖται τῶν βαναύσων τεχνῶν, ἀγαπητῶς ἐκ τῆς ἐφ' ἡμέραν ἐργασίας τὴν τροφήν ἑαυτοῖς συμπορίζοντες, περιστήκασιν ἡμᾶς, οἱ τὸν λόγον ἡμῖν συντέμνουσιν, ἵνα μὴ ἐπὶ πολὺ τῆς ἐργασίας ἀφέλκωνται. (Bas. Hex. III.1.15-23)

[Basil is just starting his third homily.] "Yesterday then, as far as we were able, we delighted our souls by conversing about the oracles of God, and now today we are met together again on the second day to contemplate the wonders of the second day. [*Alla gar*] I know that many artisans, belonging to mechanical trades, for whom a day's labour hardly suffices to maintain them, are crowding around me. They compel me to abridge my discourse, so as not to keep them too long from their work."

The presence of ἀλλά does not seem all that surprising. The ἀλλὰ γάρ utterance contains a metadiscursive transition to something unexpected – Basil had announced he would be talking about 'the wonders of the works of the second day' (τῶν τῆς δευτέρας ἡμέρας ἔργων τὰ θαύματα), but now he states that the laborers in his audience lead him to shorten (συντέμνουσιν) his discourse, so that they can return to their work. In that sense, there is sharp discontinuity here – the preceding utterance had raised the expectation that Basil would just talk about the wonders of the works of the second day without any inhibitions, but the ἀλλὰ γάρ utterance indicates that these expectations will have to be adjusted.

While the presence of ἀλλά can be explained away, then, the addition of γάρ is a headscratcher. Analyses in the direction of an Explanation or, more generally, elaboration seem to be non-starters, while a subsidiarity account would be, at best, highly subjective – the fact that Basil will abridge his discourse is important information for those present, as it will allow them to listen to his words safe in the knowledge that they will be able to return to work. The secondary literature offers no real solutions,

⁵⁶ In one of the other two, Basil states that he has noticed that his audience has 'asked for an account of the creation of man' (τὰ περὶ τῆς τοῦ ἀνθρώπου γενέσεως ἀπαιτούμενος, cf. Bas. Hex. IX.6.9-10). As such, this example is also metadiscursive, with Basil preparing a transition to his next topic (God's creation of mankind). The remaining example is discussed in footnote 60.

either. Denniston (1954²: 100) hitches his wagon to Misener's (1904) analysis – both argue that ἀλλά pertains to an omitted clause for which the γάρ utterance provides an explanation. He goes on (1954²: 101) to note that ‘but, as a matter of fact, ...’ is the optimal translation “in the great majority of cases” (although there are “certain marked deviations”), and that “[t]he sense conveyed is that what precedes is irrelevant, unimportant, or subsidiary”. Besides the fact that Denniston's translation seems awkward for the majority of cases of ἀλλά γάρ in the *Hexaemeron*, it would seem strange that γάρ would mark utterances which are more relevant than the preceding ones, given that this is the exact opposite of the function proposed for γάρ in existing coherence analyses. A unitary account (or, at the very least, a non-enantiosemous account, on which one DM encodes one function and its exact opposite) would seem preferable, and an explanation along the lines of the rule provided in (59) does seem to hold some promise – τὸν λόγον would refer back to the topic and speech Basil has just announced (τῶν τῆς δευτέρας ἡμέρας ἔργων τὰ θαύματα), while modifying the audience's expectations about how that speech should be regarded. In other words, the (ἀλλά) γάρ utterance exists only to fine-tune the audience's expectations of the previous utterance, and hence modifies the audience's assumptions about the upcoming speech. This type of adjustment can be unexpected, of course, which means that γάρ and ἀλλά are not inherently incompatible.

Examples like (60)⁵⁷ can then be subsumed under the procedural rule in (59), as can (61):

(61) Ὅταν οὖν καθέζησθε τὴν τούτων ἐργασίαν ἀναπηνιζόμενοι, αἱ γυναῖκες, τὰ νήματα λέγω ἃ πέμπουσιν ὑμῖν οἱ Σῆρες πρὸς τὴν τῶν μαλακῶν ἐνδυμάτων κατασκευὴν, μεμνημένοι τῆς κατὰ τὸ ζῶον τοῦτο μεταβολῆς, ἐναργῆ λαμβάνετε τῆς ἀναστάσεως ἔννοιαν, καὶ μὴ ἀπιστεῖτε τῇ ἀλλαγῇ ἣν Παῦλος ἅπασι κατεπαγγέλλεται. Ἀλλὰ γάρ αἰσθάνομαι τοῦ λόγου τὴν συμμετρίαν ἐκβαίνοντος. (Bas. *Hex.* VIII.8.20-26)

[Basil is discussing the metamorphoses of winged creatures – in this particular case, the metamorphosis of the Indian horned worm.] “When, then, you are seated busy with

⁵⁷ See also Bas. *Hex.* III.10.18, which is even more straightforward:

μέλλει δὲ τὸν προσήκοντα ἔπαινον καὶ παντὶ ὁμοῦ τῷ κόσμῳ ἀπαρτισθέντι πληροῦν. Ἀλλὰ γάρ ἐνταῦθα ἡμῖν οἱ περὶ τῆς δευτέρας ἡμέρας καταληξάτωσαν λόγοι [...].

“Soon, when His work is complete, He will accord well deserved praise to the whole together as well. [*Alla gar*] let me here end my discourse on the second day, [...].”

The (ἀλλά) γάρ utterance here explains the μέλλει (‘he will...’) in the preceding utterance, stating that Basil will return to this topic in his next homily. However, the transition to the conclusion of the speech is still sudden, which explains the presence of ἀλλά.

your weaving, women, – I mean of the silk which is sent you by the Chinese to make your delicate dresses –, remember the metamorphosis of this creature, conceive a clear idea of the resurrection, and do not refuse to believe in the change that Paul announces for all men. [*Alla gar*] I notice that my discourse oversteps the accustomed limits.”

Once again, Basil makes metadiscursive mention of his previous utterances via τοῦ λόγου, stating that it is ‘transgressing suitable size’ (τὴν συμμετρίαν ἐκβαίνοντος). Via the (ἀλλά) γάρ utterance, he makes clear that he thinks he strayed too far from his main point in the preceding utterance(s), and that they should be considered as such. In that sense, the (ἀλλά) γάρ utterance leads the hearer towards the speaker-intended positive cognitive effects associated with the preceding utterances – that is, that they should interpret these utterances as ones which lead too far from his core message. The presence of ἀλλά is again easier to explain – the ἀλλά γάρ utterance marks a clear break from the subject matter which had been under discussion.⁵⁸

Another instance of ἀλλά γάρ is (62) – however, this one is somewhat different:

(62) Ἵνα οὖν πρὸς τὴν μέλλουσαν ζωὴν τὴν ἔννοιαν ἀπαγάγη, μίαν ὠνόμασε τοῦ αἰῶνος τὴν εἰκόνα, τὴν ἀπαρχὴν τῶν ἡμερῶν, τὴν ὁμήλικα τοῦ φωτὸς, τὴν ἁγίαν κυριακὴν, τὴν τῇ ἀναστάσει τοῦ Κυρίου τετιμημένην. Ἐγένετο οὖν ἑσπέρα, φησὶ, καὶ ἐγένετο πρωΐ, ἡμέρα μία. Ἀλλὰ γὰρ καὶ οἱ περὶ τῆς ἑσπέρας ἐκείνης λόγοι ὑπὸ τῆς παρουσίας ἑσπέρας καταληφθέντες, ἐνταῦθα ἡμῖν τὸν λόγον ὀρίζουσιν. (Bas. Hex. II.8.74-81)

[Basil is discussing why Scripture refers to the first day as ‘one day’.] “Thus it is in order that you may carry your thoughts forward towards a future life, that Scripture marks by the word ‘one’ the day which is the type of eternity, the first fruits of days, that which is of like age as light, the holy Lord's day honoured by the Resurrection of our Lord. ‘And the evening and the morning were one day.’ [*Alla gar*] even while I am conversing with you about the first evening of the world, evening takes me by surprise, and from there puts an end to my discourse.”

It could again be argued that the (ἀλλά) γάρ utterance eases the interpretation process for Basil's audience here – indicating that the previous utterance should be regarded as the closing statement of his second homily (with ἀλλά pointing to sharp discontinuity, closing off the current topic and, more importantly, the homily as a

⁵⁸ Bas. Hex. V.9.10 is similar to (61):

Ἀλλὰ γὰρ ὁρῶ μοι τὸν λόγον τῇ ἀπληστίᾳ τῆς θεωρίας εἰς ἀμετρίαν ἐκπίπτοντα.

“[*Alla gar*] I perceive that an insatiable curiosity is drawing out my discourse beyond its limits.”

whole). Yet something more seems to be going on here. Basil here connects the utterance preceding (ἀλλά) γάρ and the (ἀλλά) γάρ utterance in a different sense as well, linking the evening (ἑσπέρας) he was talking about (and was quoting from Scripture – Ἐγένετο οὖν ἑσπέρα, φησὶ, καὶ ἐγένετο πρωΐ, ἡμέρα μία) with evening falling in the extratextual context, i.e., outside of the location where he is talking. As such, the topic of Basil’s discourse is placed against the extratextual reality, which gives rise to additional positive cognitive effects which would not have occurred otherwise. The (ἀλλά) γάρ utterance leads to overall optimal relevance by connecting an additional assumption to the ones activated in the preceding utterance, and hence achieves optimal relevance only in light of another utterance.

The additional positive cognitive effects engendered by the addition of the (ἀλλά) γάρ utterance in (62) should be considered poetic effects. These effects cannot be described propositionally, but should rather be characterized in terms of ‘aesthetic experience’, “a particular kind of brain activity” which provokes a “marginal increase in salience of many assumptions” (Pilkington 2000: 166). In the case of (62), these may include a realization (and subsequent appreciation) of the parallelism between the subject matter of the homily and the extratextual reality⁵⁹, and/or a realization of the time which has passed since the beginning of the homily – the hearer would now be aware that he been so captivated by the speech that he had lost track of time.⁶⁰

⁵⁹ See Sperber & Wilson (1995²: 222-224) on the poetic effects which can be associated with parallelism.

⁶⁰ See Bas. *Hex.* VII.6.50 for another example which relies on parallelism – in this case, between the subject matter and the metadiscursive transition to another topic. Basil had been talking about the variety of creatures in the seas when he states the following:

Ἀλλὰ γὰρ ἀναδραμόντες ἐκ τῶν βυθῶν, ἐπὶ τὴν ἡπειρον καταφύγωμεν.

“[*Alla gar*] let us come out of the depths of the sea and take refuge upon the shore.”

Here, then, the transition to a new topic is painted in terms related to the preceding topic. As such, the (ἀλλά) γάρ utterance harks back to the preceding utterance and characterizes it as the final utterance on the current topic, using its imagery to mark a metadiscursive transition. Bas. *Hex.* VIII.7.64 is comparable to this last example in that it refers back to the imagery discussed there:

Ἀλλὰ γὰρ ἔοικα πλεῖον ἀπολείπεσθαι τῷ λόγῳ τοῦ θαύματος τῶν πτηνῶν, ἢ εἰ τοῖς ποσὶν αὐτῶν ἐπειρώμην ἐφικνεῖσθαι τοῦ τάχους.

“[*Alla gar*] it appears to me that I remain further behind in describing the marvels of winged creatures, than I should if my feet had tried to match the rapidity of their flight.”

With τῷ λόγῳ τοῦ θαύματος τῶν πτηνῶν (‘the description of the marvels of winged creatures’), Basil explicitly refers back to what he had been discussing previously – as such, the (ἀλλά) γάρ utterance only makes sense against the previous utterance(s). However, it also casts those previous utterance(s) in a certain light, presenting them as only a small part of the wonders we can encounter in that part of the animal world. At the

This leaves one instance of ἀλλὰ γάρ, which is much more difficult to explain. It was already mentioned in footnote 56, but will be quoted in full here:

(63) Ἡ οὐχ ὁρᾷς ὅτι φρυγανιζομένῳ τῷ Παύλῳ ἐνάψας ὁ ἔχις οὐδεμίαν προσετρίψατο βλάβην, διὰ τὸ πλήρη πίστεως εὐρεθῆναι τὸν ἅγιον; Εἰ δὲ ἄπιστος εἶ, φοβοῦ μὴ μᾶλλον τὸ θηρίον ἢ τὴν σεαυτοῦ ἀπιστίαν, δι' ἧς πάσῃ φθορᾷ σεαυτὸν εὐάλωτον κατεσκεύασας. Ἀλλὰ γὰρ αἰσθάνομαι πάλαι τὰ περὶ τῆς τοῦ ἀνθρώπου γενέσεως ἀπαιτούμενος, καὶ μονονουχὶ ἀκούειν δοκῶ μοι τῶν ἀκροατῶν ἐν ταῖς καρδίαις καταβοώντων, ὅτι τὰ μὲν ἡμέτερα ὁποῖά τινά ἐστι τὴν φύσιν διδασκόμεθα, ἡμᾶς δὲ αὐτοὺς ἀγνοοῦμεν. (Bas. Hex. IX.6.4-13)

[Basil is arguing that faith trumps everything – those who have it, need not fear ‘serpents and scorpions’:] “Do you not see that the viper which attached itself to the hand of Paul, while he gathered firewood, did not injure him, because it found the saint full of faith? If you have not faith, do not fear beasts so much as your faithlessness, which renders you susceptible of all corruption. [*Alla gar*] I see that for a long time you have been asking me for an account of the creation of man, and I seem to only hear you all cry in your hearts, ‘We are being taught the nature of our belongings, but we are ignorant of ourselves’.”

It is much less straightforward to connect the ἀλλὰ γάρ utterance to the preceding one here – the ἀλλὰ γάρ utterance revolves less around the previous subject matter and more around what Basil’s audience wants him to discuss (i.e., God’s creation of mankind). The ἀλλὰ γάρ utterance could conceivably be considered to lead to positive cognitive effects related to the preceding utterance in the sense that it portrays that preceding utterance as preparation for the next topic (the creation of mankind), and that Basil’s reluctance to get into that topic until now should not be regarded as an oversight on his part. He realizes that this is what they want to hear, and the addition of the ἀλλὰ γάρ utterance may make his audience more inclined to forgive his earlier foray into other matters. Put differently, the ἀλλὰ γάρ utterance achieves relevance not only by indicating a sharp break with the preceding subject matter (as indicated by ἀλλά), but also by placing the preceding utterances in a broader context – as a prelude to the good stuff (as envisioned by Basil’s audience). In that sense, the ἀλλὰ γάρ utterance

same time, the latter part of the (ἀλλά) γάρ utterance uses the imagery associated with the creatures discussed to draw a parallel between their rapid flight (τοῦ τάχους) and Basil’s inability to present them in all their variety (he ‘gets left further behind’, πλεῖον ἀπολείπεσθαι, than if he had tried to match their rapid flight with his own feet, ἢ εἰ τοῖς ποσὶν αὐτῶν ἐπειρώμην ἐφικνεῖσθαι τοῦ τάχους). As such, there are again poetic effects associated with the parallelism engendered by the ἀλλὰ γάρ utterance in combination with the preceding one.

leads to speaker-intended positive cognitive effects for the preceding set of utterances – effects which might not have arisen without the ἀλλὰ γάρ utterance, which allays the hearers’ impatience by locating the previous subject matter within the larger structure of his speech.

Of course, the argument here is more convoluted than for the other ἀλλὰ γάρ utterances under consideration – but I believe it still makes more sense than an elaboration or subsidiarity account. From a more general point of view (and as stated above), these utterances point to the fact that γάρ’s function cannot be captured by having recourse to coherence relations or subsidiarity. Its meaning must be more broadly applicable in order to explain the wide range of contexts in which it appears – among which are collocations with a sharply discontinuous DM like ἀλλά. As such, ἀλλὰ γάρ can be seen as a case study in the limits of a coherence approach to DMs (and to γάρ, specifically).⁶¹

4.3 Conclusions

Γάρ may well be one of the most inscrutable DMs in Ancient Greek. This is, as has become clear throughout this chapter, mostly due to the variety of the contexts in which it occurs, many of which resist a coherence-based analysis:

(64) τίς οὐκ οἶδε τὴν Ἀλεξανδρέων ἀπανθρωπίαν; οἱ πρὸς πολλοῖς ἄλλοις, οἷς ἐνεανιεύσαντο καθ’ ἡμῶν ἀμέτρως τῷ καιρῷ χρησάμενοι, δῆμος ὄντες στασιώδης φύσει καὶ μανικὸς, ἔτι καὶ τοῦτο λέγονται προσθεῖναι τοῖς ἀσεβήμασιν, αἵματος διπλοῦ τὸν ἱερὸν οἶκον ἡμῶν ἐμπλῆσαι, ὅσος τε θυσιῶν καὶ ὅσος ἀνθρώπων· καὶ ταῦτα ἐργάσασθαι,

⁶¹ The ἀλλὰ γάρ collocation is less common in my corpus than it is in earlier and even contemporary writers – Plato’s collected works contain a total of 71 instances of the ἀλλὰ γάρ collocation (this means that 1.58% of all ἀλλά s in Plato occurs with γάρ; 1.29% of all γάρ’s with ἀλλά) for instance; Philo’s have 62 (1.89% of all ἀλλά’s with γάρ; 1.02% of all γάρ’s with ἀλλά); Eusebius’s have 252 (4.12% of all ἀλλά’s with γάρ; 2.84% of all γάρ’s with ἀλλά). John Chrysostom’s works – who, as stated, forms part of the so-called ‘Three Holy Hierarchs’ in Eastern Christianity with Basil and Gregory, and who studied with Basil at the feet of the orator Libanius (Cribiore 2007: 2) –, contain 118 instances of ἀλλὰ γάρ (0.23% of all ἀλλά’s with γάρ; 0.18% all γάρ’s with ἀλλά), compared with 30 in Basil (0.62% of all ἀλλά’s with γάρ; 0.44% of all γάρ’s with ἀλλά) and 3 (0.12% of all ἀλλά’s with γάρ; 0.08% of all γάρ’s with ἀλλά) in Gregory. As stated, the ἀλλὰ γάρ collocation does not occur at all in the *Aethiopica*. While these numbers mean little on their own, and no larger conclusions can be drawn from them, the ἀλλὰ γάρ collocation seems to be relatively infrequent in the authors under consideration in this dissertation.

στρατηγοῦντός τινος ἑνὸς τῶν βασιλικῶν φιλοσόφων, ἐκ τούτων μόνον ὀνομασθέντος; Τίς ἀγνοεῖ τὴν Ἡλιουπολιτῶν συστροφήν; τίς τὴν Γαζαίων ἀπόνοιαν, τῶν ὑπ’ ἐκείνου θαυματομένων καὶ τιμωμένων, ὅτι καλῶς αὐτοῦ τῆς μεγαλοπρεπείας ἤσθοντο; τίς τὴν Ἀρεθουσίων μανίαν, τῶν τέως ἀγνοουμένων, ἐξ ἐκείνου δὲ τοῦ καιροῦ καὶ λίαν ἐπιγινωσκομένων; Ποιεῖ γὰρ περιβοήτους οὐ δεξιὰ πρᾶξις μόνον, ἀλλὰ καὶ κακία, νικῶσα πονηρῶν εὐδοκίμησιν. Οἱ μὲν γὰρ λέγονται, δεῖ γὰρ ἓν ἐκ πολλῶν εἰπεῖν, φρίκης καὶ τοῖς ἀθέοις ἄξιον, παρθένους ἀγνάς καὶ ὑπερκοσμίους, ἀψάυστους μικροῦ καὶ ὀφθαλμοῖς ἀρρένων, εἰς μέσον προαγαγόντες, καὶ τῆς ἐσθῆτος γυμνώσαντες, ἵνα τῇ θεᾷ πρότερον ἐνυβρίσωσιν, εἴτ’ ἀνακείραντες, καὶ διχάσαντες [...]. (Greg. *Iul.* I.613.40-616.19)

[Gregory is discussing Julian’s measures aimed specifically at Christians.] “Who does not know of the cruelty of the Alexandrians, who, besides the many other atrocities they committed against us [i.e., Christians, SZ], taking immoderate advantage of the occasion, being a population by nature factious and furious, are reported to have added this also to their impious deeds, that they filled our sacred edifice with double-natured blood – alike that of sacrificed beasts and murdered men; and to have done this under the direction of a certain person amongst the Emperor's philosophers, only celebrated for deeds of the sort. Who is ignorant of the tumult of the Heliopolitans? Who, of the mad behaviour of the people of Gaza – those that were praised and rewarded by that man because they had properly appreciated his magnificence? Who has not heard of the insanity of the Arethusians, who were previously unknown, but ever since that time only too notorious? [*Gar*] it is not only distinguished conduct that renders people famous, but also any wickedness that surpasses other people's reputation for evil. They [*gar*] are said – I must [*gar*] relate one fact out of many, a thing to cause a shudder even in those without God! – to have seized consecrated virgins, above the mundane, and unpolluted almost by even the eyes of males, and brought them out into their midst, stripping them of their clothes in order to abase them first by the exposure, then ripping them up and cutting them open, [...].”

The three γάρ’s here all occur in a different context. The first one amounts to an implicit premise – Gregory provides an analysis of the concept of notoriety (ἐπιγινωσκομένων in the preceding utterance). In light of the γάρ utterance, the audience can understand how the Arethusians were able to become famous. The second one, which explains why the Arethusians became notorious, is an Explanation. This second γάρ utterance is broken up by the third γάρ utterance, which proleptically and metadiscursively paints the second γάρ utterance as just one horrible act out of many (ἓν ἐκ πολλῶν). This third γάρ utterance could be considered subsidiary, but cannot be analyzed under any elaborative coherence relation.

(64) is indicative of some of the problems associated with a coherence approach to γάρ. There is one instance (the second γάρ) which can obviously be subsumed under the Explanation relation (and hence the elaboration hyperonym) – just as there are, in

general, many examples of γάρ utterances in my corpus which are explanatory (and hence elaborative) in some sense. The other two γάρ utterances, however, are more difficult to assess under a coherence framework – just as, in general, many examples of γάρ utterances cannot be considered to be elaborative. The first γάρ in (64), for example, is related to Explanations but still different, providing information for how the previous state of affairs *can* be true (not for why it *is* true). It explains how the Arethusians could become notorious (ἐπιγινωσκομένων) by considering the very notion of notoriety (people can become famous for heinous acts as well as ‘distinguished conduct’ or δεξιὰ πρᾶξις), not why they became famous – this is explained in the second γάρ utterance. As such, the second γάρ utterance amounts to an implicit premise made explicit – the basis of Gregory’s question, which is centered around the concept of notoriety, relies on the premise that people can become famous for doing evil (see §4.2.3.1 for more on how implicit premises differ from Explanations). The third γάρ is different altogether – not only because it is proleptic, but also because it contextualizes the upcoming utterance as one insane act of the Arethusians among many. As such, this third γάρ utterance will adjust the audience’s estimation of the upcoming utterance – the terrible acts wrought by the Arethusians on the bishop Marcus, which are sickening enough on their own, are just one instance of the horrors they committed. There is, to my knowledge, no coherence relation which can adequately label this type of metadiscursive comment – but it can straightforwardly be subsumed under the procedural rule in (59), painting another utterance in a certain way (in this case, as one horrible act out of many) as to ensure that it is interpreted as the speaker intends it, and that it achieves the intended positive cognitive effects.

One response to this variety of contexts in which γάρ appears is to correlate its meaning with the context in which it occurs. This is what earlier approaches to γάρ often did, and what the elaboration analysis in Figure 4.1 implies. Another reaction would be to try and induce a general function for γάρ which is separate from its contexts but would enable it to appear across (and prompt its use in) these contexts. This is what Sicking (1993) and Black (2002) have done, and I have hitched my analytical wagon to their proposals in this chapter. Although our perspectives and conclusions differ, I hope to have at least implied that their analyses were on the right track – while they both think that γάρ is about some sort of subsidiarity, I believe that γάρ’s suboptimality should be seen against its contributions to overall optimal relevance. This function falls out naturally from the relevance-theoretic comprehension heuristic – γάρ limits the hearer’s processing effort by indicating which contextual assumptions are highly salient for its speaker-intended interpretation, and increases the positive cognitive effects yielded by the interpretation process. In other words, the effort expended by processing the γάρ utterance is offset by the positive cognitive effects which arise (and arise more quickly and easily) by interlocking the assumption(s)

communicated by the γάρ utterance with those communicated by the (usually) preceding utterance.⁶²

Recall that the problem with the elaborative and subsidiarity hypotheses was that they were too strong – they left too many γάρ utterances out of the equation. However, watering down the subsidiarity hypothesis further is no real solution – this hypothesis already amounts to a weakened form of the elaborative hypothesis (see (19) and (19')). The crux was not that the coherence approaches to γάρ were too strong, but that they could not offer the tools to deal with what I have called γάρ's 'messiness'. These analyses ran into particular trouble with γάρ's shell use and its occurrence with implicit premises and metadiscursive comments, neither of which can be painted in terms of any coherence relation.

Moreover, coherence theories seem to assume that the relations they propose can be finely distinguished in actual use – as we have seen, this is not so straightforward. (40) is both an exemplification and explanation; (41) is both a reformulation and an explanation. At the very least, the co-occurrence of these relations would warrant an account of how their interaction influences the effects the hearer derives from these utterances. More generally, it raises the question of how discrete these different relations really are. In the same way, an example like (51), which is both explanatory and non-subsidiary, is puzzling on a coherence account – explanations are subsidiary, but the information contained in the γάρ is clearly not subsidiary. By focusing on categorization, coherence analyses leave no room for these types of 'messy' examples – i.e., examples which achieve positive cognitive effects in more complex ways.

In addition, a coherence approach is not fine-grained enough to deal with the differences between various subtypes of the same coherence relation. In §4.2.3.6, I made the case that the [comparisons + reformulation] examples which are marked by γάρ should be regarded as a specific form of reformulations, and as such give rise to specific positive cognitive effects which arise in addition to the regular effects associated with reformulation.

I have argued that an approach under which γάρ would amount to a constraint on relevance was better suited to deal with the range of contexts in which it appears – γάρ is a device at the speaker's disposal with which he can optimize relevance over a longer stretch of discourse, indicating which assumptions are necessary to derive the optimal interpretation of another utterance.

Relevance theory offers an alternative view of looking at these utterances – not as subsidiary, but as contributing to overall relevance by communicating assumptions which are highly relevant for arriving at the speaker-intended interpretation of another

⁶² With proleptic γάρ utterances, the γάρ utterance interlocks with the following utterance, of course.

utterance (usually the preceding one). In that sense, I believe RT offers us the theoretical machinery needed to construct a more inclusive and cognitively founded account of γάρ's meaning. It also paves the way for an analysis of γάρ's (and other DMs') manipulative potential (in the pejorative sense), which I will touch on in the final chapter of this dissertation (see also §4.2.3.6).⁶³

⁶³ In the next chapter, I will discuss additional γάρ examples in the footnotes to the οὐν examples; I also discuss one or two interesting δέ examples, but the sheer volume of δέ examples prevents an analysis of each separate occurrence.

Chapter 5

A relevance-theoretic analysis of οὔν's semantics

This last chapter of Part 2 deals with οὔν. As in the previous two chapters, I first discuss existing accounts of οὔν's meaning (§5.1). In §5.2, I argue that, although οὔν may appear in what seems to be very divergent contexts, a unitary analysis of its meaning is possible and preferable (§5.2; §5.2.3 specifically). I first go over the problems associated with earlier analyses (§5.2.1), before transitioning to a brief discussion of οὔν's procedurality (§5.2.2). I also compare οὔν to δέ, given that they can occur in very similar contexts – by looking at these contexts, I attempt to filter out the differences between the two (§5.2.4). In §5.2.5, I propose a procedural rule which would apply to all instances of οὔν – I will argue that οὔν indicates that the upcoming assumption is mutually manifest. §5.2.6 deals with the collocation γὰρ οὔν – Bakker's (2009) views are weighed against the data from my corpus, and an alternative approach is suggested. In §5.3, finally, I formulate my conclusions.

5.1 Existing approaches to οὔν

I'll begin this chapter with an overview of earlier approaches to οὔν's meaning – note that, as with γάρ, a brief overview of earlier scholarship into οὔν was already provided in chapter 1 (see (12), (19) and (20) there for examples of its use). Stage II approaches to οὔν are generally polyfunctional, providing lists of different uses; Stage III approaches are more coherence-oriented, focusing on οὔν's role in transitioning from a lower level of the discourse hierarchy to a higher (or 'more relevant') one.

5.1.1 Stage II approaches to οὖν: progressive, inferential, resumptive

According to Denniston, οὖν is only used with the temporal subordinators ἐπεὶ and ὥς in the earliest literary Greek available to us, in a subordinate clause “which refers to something previously described or implied” (1954²: 416).¹ Eventually, it developed into a connective in its own right. In this sense, it can be used purely as a progressive particle, “marking a new stage in the sequence of events” (as in (3) *infra*), or as an inferential particle, marking a logical implication (id.: 425-6; see (2) *infra*). Denniston also distinguishes a ‘resumptive use’, which takes up the “main thought” after a digression (id.: 428):

(1) Κόλχοι δὲ τὰ ἐτάξαντο ἐς τὴν δωρεὴν καὶ οἱ προσεχέες μέχρι Καυκάσιος ὄρους (ἐς τοῦτο γὰρ τὸ ὄρος ὑπὸ Πέρσῃσι ἄρχεται, τὰ δὲ πρὸς βορέην ἄνεμον τοῦ Καυκάσιος Περσέων οὐδὲν ἔτι φροντίζει), οὗτοι ὥν² δῶρα τὰ ἐτάξαντο ἔτι καὶ ἐς ἐμὲ διὰ πεντετηρίδος ἀγίνεον, ἑκατὸν παῖδας καὶ ἑκατὸν παρθένους. (Herodotus, *Histories* 3.97.4)

[Herodotus is discussing the Persians’ tributaries:] “The Colchians also had set themselves among those who brought gifts, and with them those who border upon them extending as far as the range of the Caucasus (for the Persian rule extends as far as these mountains, but those who dwell in the parts beyond Caucasus toward the North Wind regard the Persians no longer). These [ὥν] continued to bring the gifts which they had fixed for themselves every four years even still down to my own time, that is to say, a hundred boys and a hundred maidens.” (tr. Macaulay 1890)

The οὖν (ὥν) utterance³ takes up the fact that the Colchians are bringing gifts – Herodotus had divulged this information just before he transitioned to his observation about the geographic extent of Persian rule (Κόλχοι δὲ τὰ ἐτάξαντο ἐς τὴν δωρεὴν). Note that the digression between the δέ utterance and the οὖν utterance is marked by γάρ – in Stage III DM research, γάρ and οὖν are considered two sides of the same coin.

Smyth (1920: 664) distinguishes between ‘confirmatory’ and ‘inferential’ οὖν, although the lines between the two are blurred. His main point seems to be that οὖν “signifies that something follows from what precedes”. ‘Confirmatory’ οὖν indicates that the upcoming information is already known, while Smyth’s conception of ‘inferential’ οὖν is very broad, referring to those instances which contain deductive conclusions, transitions to “a new thought” (akin to Denniston’s ‘progressive’ use), and

¹ See Reynen (1957) for an expansive overview of ἐπεὶ οὖν in Homer, and Reynen (1958a) for the same on ὥς οὖν.

² In Herodotus’ Ionian dialect, ὥν is the equivalent of οὖν, as stated in the Introduction.

³ In line with the previous chapters, I use ‘οὖν utterance’ as shorthand for ‘utterance which is marked by οὖν’.

resumptive utterances (1920: 665). As such, his categorization is not that different from Denniston's.

Des Places recognizes four distinct uses of οὖν, which he generally translates as *donc* in French (1929: 3). The first use, however, he translates as *en fait* – utterances marked by this type of οὖν insist on the truth of a particular fact which is given as proof of a general affirmation (id.: 6). If this use seems obscure, that is because it is – this description is quite confusing, and, like so many Stage II particle descriptions, remains stuck at a pre-theoretical, intuitive level which is sometimes hard to grasp. The second use is clearer: it can be labeled the ‘consecutive’ use of οὖν, and is used to mark syllogistic/enthymematic conclusions, conclusions derived from the response of an interlocutor, and even “la reprise d’une idée” (id.: 11). As such, this second use corresponds to both Denniston’s ‘inferential use’ and his ‘resumptive’ use. Examples of this ‘inferential’ use can be found in (2):

(2) εἰ μὲν γὰρ ἦν μοι χρήματα, ἐτιμησάμην ἂν χρημάτων ὅσα ἔμελλον ἐκτεῖσειν, οὐδὲν γὰρ ἂν ἐβλάβην· νῦν δὲ οὐ γὰρ ἔστιν, εἰ μὴ ἄρα ὅσον ἂν ἐγὼ δυναίμην ἐκτεῖσαι, τοσούτου βούλεσθέ μοι τιμῆσαι. ἴσως δ’ ἂν δυναίμην ἐκτεῖσαι ὑμῖν που μνᾶν ἀργυρίου· τοσούτου οὖν τιμῶμαι. Πλάτων δὲ ὅδε, ὦ ἄνδρες Ἀθηναῖοι, καὶ Κρίτων καὶ Κριτόβουλος καὶ Ἀπολλόδωρος κελεύουσίν με τριάκοντα μνῶν τιμῆσασθαι, αὐτοὶ δ’ ἐγγυᾶσθαι τιμῶμαι οὖν τοσούτου, [...]. (Plato, *Apology* 38b1-8)

[Socrates is defending himself.] “If I had money, I would have proposed a fine as large as I could pay; for that would have done me no harm. But as it is – I have no money, unless you are willing to impose a fine which I could pay. I might perhaps pay a mina of silver. So large [*oun*] I a penalty I propose; but Plato here, men of Athens, and Crito and Critobulus and Aristobulus tell me to propose a fine of thirty minas, saying that they provide sureties for it. I propose [*oun*] a fine of such amount, [...].” (tr. Fowler (1914), with alterations)

Socrates first states that he would agree to pay a fine; he then informs the judges that he only has a mina. As a result (οὖν), he proposes a fine of one mina. After consulting with his students, he informs the judges that he will be able to pay thirty minas, so (οὖν) he proposes that amount as his fine. In both cases, οὖν marks an inferential conclusion. Oréal, who investigates οὖν in Demosthenes’ speeches, emphasizes οὖν’s “valeur inférentielle” as well – it is, she argues, particularly suited for marking argumentative conclusions (1997: 237).

The third use of οὖν distinguished by Des Places corresponds to Denniston’s ‘progressive’ use – οὖν can mark a transition to another part of the argumentation, or a different step in the story (id.: 56):

(3) ἄρας δὲ ἀπὸ τοῦ Τίγρητος ἦει διὰ τῆς Ἀσσυρίας χώρας, ἐν ἀριστερᾷ μὲν ἔχων τὰ Γορδυηνῶν ὄρη, ἐν δεξιᾷ δὲ αὐτὸν τὸν Τίγρητα. τετάρτη δὲ ἡμέρα ἀπὸ τῆς διαβάσεως οἱ πρόδρομοι αὐτῷ ἐξαγγέλλουσιν, ὅτι ἱππεῖς οὗτοι πολέμιοι ἀνὰ τὸ πεδῖον φαίνονται, ὅσοι δέ, οὐκ ἔχειν εἰκάσαι. ξυντάξας οὖν⁴ τὴν στρατιὰν προὔχῳρει ὡς ἐς μάχην· καὶ ἄλλοι αὖ τῶν προδρόμων προσελάσαντες ἀκριβέστερον οὗτοι κατιδόντες ἔφασκον δοκεῖν εἶναί σφισιν οὐ πλείους ἢ χιλίους τοὺς ἱππέας. Ἀναλαβὼν οὖν τὴν τε βασιλικὴν ἵλην καὶ τῶν ἐταίρων μίαν καὶ τῶν προδρόμων τοὺς Παίονας ἤλαυνε σπουδῇ, τὴν δὲ ἄλλην στρατιὰν βάδην ἔπεσθαι ἐκέλευσεν. (Arrian, *Anabasis of Alexander* III.7.7.1-III.8.1.4)

[Alexander is chasing Darius through modern-day Syria and Iraq] “Leaving the Tigris, Alexander passed through the country of Assyria with the Gordyaeen mountains on his left, and the Tigris on his right. On the fourth day after the crossing, his advance scouts reported that enemy cavalry were sighted here over the plain, but they could not guess their numbers. So drawing up his force he advanced as to battle; when other scouts again rode in, and those having had a more precise view reported that they thought the cavalry to number not above a thousand. Alexander, taking with him [oun] the royal squadron, one squadron of Companions, and, from among the advanced scouts, the Paeonians, moved on rapidly, ordering the rest of the army to follow at walking pace.” (tr. Robson 1929)

The next step in the story is marked by οὖν – after hearing the report on the enemy’s cavalry, Alexander starts his march towards battle.

Des Places’ fourth use of οὖν introduces a new idea, and so it is not obvious how distinct it is from the third use (id.: 72). Again, Des Places’ approach constitutes more a description of contexts in which οὖν occurs, and not an analysis of οὖν’s meaning.

Ostrowiecki (1994; see especially pp. 174-182) is another elaboration of the contexts in which οὖν can appear. She distinguishes six different functions for οὖν. One of these can occur when a speaker refers back to what was already said – again, this would seem tie in nicely with Denniston’s description of οὖν in resumptive utterances. Οὖν can also be used to indicate the speaker’s assent to a previous claim, according to Ostrowiecki, or to paint the speaker’s words ironically, or to provide an answer beyond ‘yes’ or ‘no’. No mention is made of an ‘inferential’ or ‘progressive’ οὖν, which may be due to the nature of Ostrowiecki’s corpus – she only looks at one of Plato’s dialogues (although, as

⁴ On a Stage II approach, this οὖν would be considered ‘inferential’ – Alexander ‘draws up his force’ (ξυντάξας τὴν στρατιὰν) as if to go to battle (ὡς ἐς μάχην) on the basis of the preceding assumptions. If you don’t know how many enemies are just over the plain, the best course of action would be to gather your forces and march out. Note that Alexander’s decision changes when new information is brought into the equation – when he is informed that there are no more than a thousand enemy forces, he takes a smaller part of his army to confront them.

evidenced in (2), there are examples of inferential οὖν in Plato). At any rate, Ostrowiecki's study may be the most blatant example of confusing the contexts in which οὖν appears with its meaning – οὖν may appear in ironic contexts, but that does not mean that οὖν is ironic; οὖν may appear in contexts where the speaker accepts someone else's claim, but that does not mean that its meaning has to do with endorsements as such.⁵

Reynen, in a series of three articles (1957; 1958a, b), analyzes οὖν in Homer. He points to the resumptive value (or "Wiederaufnahme") inherent in many of the utterances it marks (see e.g. 1957: 19 and 1958a: 74), which can be explicit or implicit.⁶ However, he also notes its 'progressive' nature – it can mark a break in the continuity of the narrative (1957: 25). Οὖν's double-pronged semantics comes to the fore most obviously in the following example (from Reynen 1957: 35):

(4) Ὡς εἰπόνθ' ὅπλοισιν ἔνι δεινοῖσιν ἐδύτην.
Τυδεΐδῃ μὲν δῶκε μενεπτόλεμος Θρασυμήδης
φάσγανον ἄμφηκες· τὸ δ' ἐὸν παρὰ νηϊ̑ λέλειπτο·
καὶ σάκος [...]

Μηριόνης δ' Ὀδυσῆϊ δίδου βιὸν ἠδὲ φαρέτρην
καὶ ξίφος, ἀμφὶ δέ οἱ κυνέην κεφαλῆφιν ἔθηκε
ῥινοῦ ποιητὴν· πολέσιν δ' ἔντοσθεν ἱμάσιν
ἐντέτατο στερεῶς ἔκτοσθε δὲ λευκοὶ ὀδόντες
ἀργιόδοντος ὕδς θαμέες ἔχον ἔνθα καὶ ἔνθα
εὔ καὶ ἐπισταμένως μέσση δ' ἐνὶ πῖλος ἀρήρει.

[...] Τὼ δ' ἐπεὶ οὖν ὅπλοισιν ἔνι δεινοῖσιν ἐδύτην, (272)

βάν ῥ' ἰέναι, λιπέτην δὲ κατ' αὐτόθι πάντας ἀρίστους. (Homer, *Iliad* 10.254-273)

[Diomedes and Odysseus are being equipped for their nightly infiltration of the Trojan camp.]

"So saying the twain clothed them in their dread armour.

To Tydeus' son [i.e., Diomedes, SZ] Thrasymedes, staunch in fight,
gave a two-edged sword – for his own was left by his ship –
and a shield [...].

And Meriones gave to Odysseus a bow and a quiver

⁵ See also §2.3.2.2, where I pointed out that procedural meaning is usually taken to be rigid, which would preclude it from being ironic in the first place.

⁶ As he puts it, 'there is no place in Homer where something from the previous text is not clearly present in the background of the utterance marked by οὖν' (freely paraphrased from Reynen (1957: 47): "Es gibst sonst keine Stelle bei Homer, wo nicht deutlich etwas aus dem voraufgehenden Text bei dem positive οὖν fortwirkend im Hintergrund stände").

and a sword, and about his head he set a helm
wrought of hide, and with many a tight-stretched thong
was it made stiff within, while without the white teeth
of a boar of gleaming tusks were set thick on this side and that,
well and cunningly, and within was fixed a lining of felt.
[...] They, when [*oun*] they had clothed themselves in their dread armour,
went their way and left there all the chieftains.” (tr. Murray (1924), with alterations)

The *oũv* utterance recaps the preceding preparations (and repeats half of verse 254 word for word), but at the same time uses the preceding utterances as the basis for a new step in the narrative – that is, the *oũv* utterance marks a transition to Diomedes and Odysseus’ departure and, hence, the narrative of their infiltration (see Reynen 1957: 35). Seen in this light, there does not seem to be too much difference between *oũv*’s function and *δέ*’s as I construed it in the second chapter of this dissertation (or even as it is commonly construed; see Sicking (1993: 27)) – as such, it is no coincidence that there is also a *δέ* present to mark this utterance. As we will see, however, *oũv*’s meaning is distinct from *δέ*’s, although both can and do appear together due to the potential for harmonization of their meanings.

There are, then, three interlocking strands in Stage II research into *oũv*. It is often taken to be inferential, marking deductive conclusions⁷; it is also taken to be resumptive, marking information which had been provided or implied before; and it can mark a ‘new step’ in the narrative or the argumentation (what I will call here *oũv*’s ‘progressive’ use).⁸ Stage III research on *oũv* should be considered more a continuation of these earlier analyses than a sharp break.

5.1.2 Stage III approaches to *oũv*: POPping in

In coherence approaches to Ancient Greek DMs, *γάρ* and *oũv* are often analyzed as two sides of the same coin (see e.g. Sicking 1993: 48). On this view, *γάρ* indicates a transition to a lower level of the discourse hierarchy, while *oũv* “indicates [...] that what follows comes nearer to the *point* than what precedes; that what precedes owes its *relevance* to what follows” (van Ophuijsen 1993: 91; his italics – see also e.g. Wakker 2009: 66). Although *oũv* has garnered the least amount of attention of the three DMs under

⁷ See also Levinsohn (1987: 137), who, in his analysis of DMs (or, in his terms, conjunctions) in *Acts*, states that *oũv* indicates “a close consequential relationship between the elements it links”.

⁸ Poythress, in his discussion of *oũv* in the Gospel of John, argues that it marks a “logical inference” in argumentative contexts (1984: 323), and is used resumptively in narrative contexts (1984: 327).

consideration in this dissertation, there are three more or less in-depth discussions of its function in Stage III DM research which take this basic assumption about οὖν's function to heart. Wakker (2009), Bakker (2009) and Black (2002) have all offered analyses of οὖν which follow a similar pattern, but are still slightly different from each other. I will examine each of them in turn.

Wakker's (2009) account of οὖν is closest to the view which has been commonly accepted among Stage III scholars, and which is summed up in van Ophuijsen's quote *supra*. She argues that οὖν is a presentational DM (2009: 80) which "very often marks the next important step in the ongoing narrative or argumentation" (2009: 67). As such, it can be considered to amount to a POP marker – the counterpart of a PUSH marker. Put differently, οὖν, on Wakker's account, is a DM which signals a transition from a lower to a higher level of the discourse hierarchy – and which is, then, the exact opposite of a PUSH marker like γάρ (Polanyi & Scha 1983: 264; see §4.1.2):

(5) ὁ Μενέστρατος οὗτος ἀπεγράφη ὑπὸ τοῦ Ἀγοράτου καὶ συλληφθεὶς ἐδέδετο· Ἀγνόδωρος δ' ἦν Ἀμφιτροπαιεύς, δημότης τοῦ Μενεστράτου, Κριτίου κηδεστῆς τοῦ τῶν τριάκοντα. οὗτος οὖν, ὅτε ἡ ἐκκλησία [ἐν] Μουνιχίασιν ἐν τῷ θεάτρῳ ἐγίγνετο, ἅμα μὲν βουλόμενος τὸν Μενέστρατον σωθῆναι, ἅμα δὲ ὡς πλείστους ἀπογραφέντας ἀπολέσθαι, παράγει αὐτὸν εἰς τὸν δῆμον, καὶ εὐρίσκονται αὐτῷ (...) ἄδειαν. (Lysias, *Against Agoratus* 55)

"That Menestratos was informed against by Agoratus, and was arrested and put in prison. Hagnodorus of Amphotrope, a fellow-townsmen of Menestratos, was a kinsman of Critias, one of the Thirty. This man [*oun*] when the Assembly was being held in the theatre at Munichia, with the double aim of saving the life of Menestratos and of causing, by means of depositions, the destruction of as many people as possible, brought him before the people, that gave him [...] impunity." (example and tr. Wakker (2009: 68), with alterations)

According to Wakker, οὖν here marks a transition from "background information" to the speaker's "next important step in the narrative" (*ibid.*) – Lysias first provides some preparatory assumptions about Hagnodorus before proceeding to his main point (i.e., his crimes) in the οὖν utterance.

Bakker (2009: 41; also Wakker 2009: 70; van Ophuijsen 1993: 91) argues that οὖν "marks the preceding utterances as subsidiary". This means that οὖν indicates that the preceding contexts are primed for the insertion of a γάρ, and *vice versa* (at least, on a coherence approach which takes γάρ to indicate subsidiarity). Intriguingly, however, Bakker goes on to cast doubt on this hypothesis ("what is generally assumed to be the common function of οὖν"), and argues that its function should be painted more in terms of accessibility – marking its utterance as containing information for which the

audience has already been “prepared” (2009: 59). She provides the following example (ibid.):

(6) ‘μηχανή’ γάρ μοι δοκεῖ τοῦ ‘ἄνειν ἐπὶ πολὺ’ σημεῖον εἶναι· τὸ γὰρ ‘μῆκος’ πως τὸ πολὺ σημαίνει· ἐξ ἀμφοῖν οὖν τούτοις σύγκειται, ‘μήκους’ τε καὶ τοῦ ‘ἄνειν’, τὸ ὄνομα ἢ ‘μηχανή’. (Plato, *Cratylus* 415a4-7)

For I think μηχανή signifies ἄνειν ἐπὶ πολὺ (‘much accomplishment’); for μῆκος (‘length’) has about the same meaning as τὸ πολὺ (‘much’). Of these two [οὖν] is it composed, the name μηχανή – μῆκος and ἄνειν. (tr. Bakker, with alterations)

(6) is very similar to (2) – in both cases, Plato marks an inferential conclusion with οὖν. The hearer has been ‘prepared’ for this conclusion in the sense that it can be derived based on “information from the preceding discourse and/or general knowledge” (ibid.). Bakker also points out that, even if οὖν is used to mark a return to a higher level of the discourse hierarchy, this utterance will contain “familiar information” (2009: 60) – in that respect, Bakker’s account is in line with Stage II analyses of οὖν, which had already honed in on οὖν’s ‘resumptive’ value.⁹

Black’s proposal for a basic function for οὖν in the Gospel of Matthew revolves around “continuation and retrospect” – she argues that οὖν marks “progression in the discourse with an eye to that which precedes” (2002: 259).

(7) Ἐν ἐκείνῃ τῇ ὥρᾳ προσῆλθον οἱ μαθηταὶ τῷ Ἰησοῦ λέγοντες, Τίς ἄρα μείζων ἐστὶν ἐν τῇ βασιλείᾳ τῶν οὐρανῶν; (2.) καὶ προσκαλεσάμενος παιδίον ἔστησεν αὐτὸ ἐν μέσῳ αὐτῶν (3.) καὶ εἶπεν, Ἀμὴν λέγω ὑμῖν, ἐὰν μὴ στραφῇτε καὶ γένησθε ὡς τὰ παιδιά, οὐ μὴ εἰσέλθητε εἰς τὴν βασιλείαν τῶν οὐρανῶν. (4.) ὅστις οὖν ταπεινώσει ἑαυτὸν ὡς τὸ παιδίον τοῦτο, οὗτός ἐστιν ὁ μείζων ἐν τῇ βασιλείᾳ τῶν οὐρανῶν. (*Gospel of Matthew*, 18.1-4)

“At that time the disciples came to Jesus, saying, ‘Who is greater in the kingdom of heaven?’ (2) And calling to him a child, he put him in the midst of them (3) and said, ‘Truly, I say to you, unless you turn and become like children, you will never enter the kingdom of heaven. (4) Whoever [οὖν] humbles himself like this child is greater in the kingdom of heaven..” (tr. English Standard Version, with alterations)

⁹ It should be noted that Bakker (2009: 60-61) underlines that many utterances of οὖν cannot be cast in terms of a “high degree of predictability”, and that she, as a result, pours cold water on her own hypothesis. Still, I think her ‘non-POP’ intuitions about οὖν are very much on the right track, as we will see.

Jesus states that only people ‘who become like children’ (γένησθε ὡς τὰ παιδία) have any chance of going to heaven. As such (οὖν), whoever humbles himself like a child, will be ‘greater’ (μείζων) in the kingdom of heaven. The οὖν utterance amounts to an inferential conclusion (i.e., a new step and hence progression in the discourse).

Black also states that “sentences introduced by οὖν follow off-line material and represent a return to the narrative line, indicating that the discourse continues with the integration of that off-line material” (2002: 260) – as such, οὖν signals, from a cognitive point of view, “that the ongoing representation is dependent in some way on material which precedes” (2002: 262). Her analysis, then, toes the line between ‘inferential’ οὖν and ‘progressive’ οὖν, with a dash of ‘resumptive’ οὖν mixed in. In other words, she, as the other Stage III analysts, builds on the accounts of Stage II scholars of οὖν.

However, there are two important problems with Black’s analysis. First, the οὖν utterance in (7) does not seem to mark a transition from ‘off-line material’ (which is never clearly defined¹⁰) to ‘the narrative line’ – instead, οὖν marks an inferential conclusion which falls out naturally from the preceding assumptions. Second, it is not at all obvious that her proposal for οὖν’s meaning sets it off adequately from δέ. On my own analysis, δέ would mark utterances as communicating a separate assumption (cf. also Black’s ‘(low- to mid-level) discontinuity’), while relying on assumptions made available in the preceding utterance(s) (cf. also Black’s ‘low- to mid-level (discontinuity)’). In that sense, the ‘continuation and retrospect’ inherent in οὖν’s meaning would seem to place it squarely in δέ’s functional domain. Given Cruse’s principle of semantic contrast (1986: 271), under which “in the majority of cases a lexical item must, in some respects at least, be different in meaning from any of its cognitive synonyms” (cf. also Hansen 2002: 515), and given the observation that οὖν and δέ can appear together in the same utterance (as we will see), an analysis which draws a more categorical distinction between οὖν and δέ would be preferable.

Other scholars have focused more on οὖν’s role as an inferential marker (e.g. Loudová 2009a: 302; 2014: 165; Drummen 2015: 129; Bentein 2016: 98), emphasizing its role in marking deductive conclusions (as in (2) and (7)). The problem here is, of course, that οὖν’s use cannot be construed exclusively in terms of inferencing – examples like (3) and (5) are clearly non-inferential.

¹⁰ Black (2002: 259) defines ‘off-line’ information as “material outside the narrative’s sequence of events”, and later on as “supplementary information” (2002: 260). Leaving aside the fact that this would leave argumentative (parts of) texts out of the equation, she offers no method of operationalizing how ‘the narrative’s sequence of events’ would differ from stretches of discourse which would *not* form part of this sequence. Examples like (9) and (10) *infra*, for example, contain οὖν utterances which are, at the very least, not less ‘off-line’ than the preceding ones.

What has become clear is that the Stage III scholars discussed here agree with Stage II research (at least implicitly and in a broad-brush sense) on the scope of οὔν's function – based on the secondary literature reviewed here, it should be located somewhere between a triangle consisting of a resumptive use, a progressive use (marking a 'new step') and an inferential use. As such, the goal is to either merge these three uses of οὔν into a unitary account, or to construct a polyfunctional (or polysemous) account which explains the relationships between these three uses. Following Grice's Modified Occam's Razor, as I did for δέ and γάρ in the previous chapters, a unitary approach would be preferable. In the next section, I will begin my attempt to forge just such an account by looking at the drawbacks and weaknesses of existing analyses of οὔν's meaning – I will eventually make the case for an account on which the three uses proposed in other accounts are folded into one, and on which οὔν functions as a constraint on the higher-level explicature, indicating that the upcoming assumption is mutually manifest.

5.2 Towards a procedural rule for οὔν: problems and perspectives

In this section, I first take a look at where earlier accounts of οὔν fall short. In §5.2.2, I briefly discuss οὔν's procedurality; §5.2.3 looks at the contexts in which οὔν appears and attempts to draw out the similarities between them. In §5.2.4, οὔν is compared with δέ. As I've just mentioned, earlier hypotheses seem to treat them in very much the same way – here, I'll take a look at those contexts where both *can* occur and where both *do* (co-)occur. In §5.2.5, I propose a procedural rule; §5.2.6 deals with the γάρ οὔν collocation.

5.2.1 Problems with existing accounts

In this section, I look at the deficiencies of earlier accounts of οὔν's meaning. I divide these accounts into two groups: one includes those scholars which see οὔν as indicating a return to a higher level of the discourse hierarchy (what I will call 'POP οὔν', cf. §5.2.1.1), while the other contains those analyses which distinguish several different functions for οὔν (§5.2.1.2). I will refer to this latter group of analyses as 'polyfunctional' analyses – on these approaches, οὔν is taken to either indicate resumptiveness, progressiveness or an inference.

5.2.1.1 Let's blow this POP stand

The POP οὖν approach is represented in its fullest form in Wakker's (2009), Sicking's (1993) and Black's (2002) studies; Bakker (2009) refers to it as well, although she also raises doubts about its viability. To recap, all of these scholars argue that οὖν marks a return (a 'POP') to a higher level of the discourse hierarchy; i.e., to a 'new step' which is more relevant than the preceding one.

The problem with this type of approach is obvious: it does not even come close to covering all instances of οὖν. This is, of course, one of the possible drawbacks of a unitary approach; yet the number of instances which are left out of the equation on the POP οὖν analysis, is striking. Examples like the following cannot reasonably be included under the POP heading¹¹:

(8) Οὗτος ὁ λόγος σοι τῶν Πορφυρίου ψευσμάτων καὶ ληρημάτων, οἷς ὑμεῖς ὡς θεαῖς φωναῖς ἀγάλλεσθε, ἢ τοῦ σοῦ Μισοπώγωνος, εἴτ' οὖν Ἀντιοχικοῦ (ἀμφότερα γὰρ ἐπιγράφεις τῷ λόγῳ), οὗ τι Χριστιανοῖς ἀτιμότερον· ὃν τότε μὲν ἡ πορφυρὶς μέγαν ἐποίει, καὶ οἱ πάντα τὰ σὰ θαυμάζοντες κόλακες. (Greg. *Iul.* II.717.17-23)

[Gregory is going to discuss Julian's essays against the Christians.] "This is the meaning of the lies and ravings of your Porphyry (of which you all boast as divinely-inspired words), and of your 'Misopogon', or [*oun*] 'Antiochicus', for you gave both names to the book – than which nothing is more contemptible in the eyes of Christians; though at the time your purple clothes [i.e., Julian's status as emperor, SZ] made it important, and the parasites that extolled all your actions."

(9) Τὸν πόλεμον δὲ ἔλεγεν ὧδε. «Ἦγετο ξένος νεανίας τις κάλλει τε καὶ μεγέθει διαφέρων ὡς Ὀροονδάτην τὸν μεγάλου βασιλέως ὕπαρχον εἰς τὴν Μέμφιν, ἀπέσταλτο δέ, οἶμαι, παρὰ Μιτράνου τοῦ φρουράρχου ληφθεὶς αἰχμάλωτος ὡς τι τῶν μεγίστων δῶρον ὡς φασί. Τοῦτον οἱ τῆς κώμης τῆς ἡμετέρας ταυτησί» δειξάσα τὴν ἐχομένην «ἐπελθόντες ἀφείλοντο, γνωρίζειν εἴτ' οὖν ἀληθεύοντες εἴτε καὶ πρόφασιν πλάσαντες. (Hel. *Aeth.* 6.13.1.1-8)

[Chariclea and Calasiris have come across the witch of Bessa; she gives an account of the battle which took place there.] "Of the fighting she gave them this account: 'A young stranger, of singular beauty and stature, was being taken to Memphis for Oroondates, the lieutenant-governor of the Great King. He had been dispatched, I believe, by Mitranes, a garrison commander, after being taken prisoner, and was offered as a gift of particular value, so they say. The people of our village here,' she went on, pointing to

¹¹ For other similar examples, see e.g. Greg. *Iul.* I.580.33-34, I.608.43, I.637.7, I.644.44, I.645.4, I.653.37 II.676.13; Hel. *Aeth.* 10.28.4.2.

the place near by, ‘waylaid the party and carried him off, stating that they knew him – either [oun] telling the truth, or also a made-up pretext.”

(10) ἄῤρ δὲ οὐκ ἐπισημαίνει τοῖς τοιοῦτοις καιροῖς, οὐδὲ ἡγιάσθη τότε τοῖς σημείοις τοῦ πάθους; Ἐπιδειξάτωσαν ἔτι καὶ νῦν τὰς ἐσθῆτας, οἱ τοῦ θαύματος ἐκείνου θεαταὶ καὶ μύσται, τὰς τότε κατασημανθείσας τοῖς τοῦ σταυροῦ στίγμασιν. Ὅμοῦ τε γὰρ¹² ταῦτα διηγείτο τις, εἴτ’ οὔν τῶν ἡμετέρων, εἴτ’ οὔν τῶν ἔξωθεν, ἢ διηγουμένων ἤκουε, καὶ τὸ θαῦμα ἑώρα παρ’ ἑαυτῷ, ἢ τῷ πλησίον γινόμενον, κατάστερος ὢν, ἢ ἐκεῖνον ὁρῶν τοιοῦτον ἐν τοῖς ἐσθήμασι, πάσης ἱστουργικῆς ψηφίδος ἢ περιέργου ζωγραφίας ποικιλώτερον. (Greg. Iul. II.672.16-27)

[Julian planned to rebuild the Temple in Jeruzalem; however, Gregory contends that God signified his displeasure at this by sending an earthquake and a great fire. He also painted the air with a sign.] “And did not air give a sign on those same occasions, and was it not hallowed then with the badges of the Passion? Let those who were spectators and partakers of that prodigy exhibit their garments still now, which are stamped with the landmarks of the Cross! For at the very moment that anyone, either [oun] of our own brethren or [oun] of the outsiders, was telling the event or hearing it told by others, he beheld the miracle happening as well in his own case or to his neighbour, being all spotted with stars, or beholding the other so marked upon his clothes in a manner more variegated than could be done by any artificial work of the loom or elaborate painting.”

In (8), Gregory gives an alternative title of his own for Julian’s essay – although ‘Antiochicus’¹³ is perhaps a more relevant title than ‘Misopogon’, especially given the Christian speaker and audience here, it can hardly be more relevant than the surrounding utterance(s), in which Gregory shows his disdain for Julian’s anti-Christian views.¹⁴ In (9), the οὔν utterance provides background about the truth of the villagers’ statement to Mitranes – if anything, the οὔν utterance here would be less relevant than the preceding one. (10) is very similar, except that οὔν marks both options – however, the fact that both Christians and pagans were discussing the miracle, is less relevant

¹² As always, γὰρ contextually anchors the preceding assumption(s) to others – here, the γὰρ utterance provides further information about the θαύματος mentioned in the preceding utterance, and how it involved clothes being stamped with clothes.

¹³ Socrates Scholasticus (4th-5th century AD), in his *Church History*, states (3.17) that this satirical work was a reaction to the Antiochians, who ridiculed Julian’s pagan practices when he visited there – hence the alternative name ‘Antiochicus’.

¹⁴ Even if the οὔν utterance is considered to be ‘more relevant’ than the surrounding utterances, the question still remains as to whether this is indeed what οὔν points to. In what follows, I will attempt to demonstrate that this is not the case, and that οὔν’s penchant for appearing in utterances which could be considered to be ‘more relevant’ than the preceding ones is derivative of its main function.

than Gregory's discussion of the miracle itself. None of these examples can be considered to be 'more to the point' than the preceding utterance in any interesting sense; but it is also difficult to subsume (9) and (10) under the resumptive/progressive/inferential trifecta to be discussed *infra* ((8) seems to be inferential in light of the γάρ utterance which follows, and which functions as a premise). I will return to these examples below.

Another, related problem with the POP οὕτως account is that the increased relevance of the οὕτως utterance, or the higher level of the discourse hierarchy which it supposedly marks, is never cashed out in theoretical terms. In other words, it's not clear what the relation would be between the different ways a POP would be marked. Let's say an inferential conclusion (e.g. (18) *infra*) from preceding premises constitutes a return to a higher discourse level (which is not at all obvious). How would this kind of POP match up with a return to the narrative after a digressive description of a city (see e.g. *Hel. Aeth.* 10.6.1.1)? Or a summary of the preceding argument or state of affairs (e.g. *Bas. Hex.* 1.6.33, *Greg. Iul.* 1.564.43 and *Hel. Aeth.* 2.30.1.1)? If all of these are examples of POP contexts, then we would certainly need a detailed account of how this POP has to be construed across the different contexts in which οὕτως occurs. It would also come dangerously close to circular reasoning – this line of thinking seems to assume that οὕτως marks POP contexts and subsequently shoehorns the utterances in which it appears into a POP analysis; this analysis is then used as proof for the original assumption (i.e., that οὕτως is a POP marker). However, the entire point is to investigate whether οὕτως does indeed function as a POP marker. If not all of the contexts in which οὕτως appears can be considered POP contexts, on the other hand, then οὕτως's meaning cannot be captured in POP terms exclusively. The next set of analyses take the latter approach – they assume that οὕτως can mark 'new steps' (of which POP contexts would presumably form a subgroup), but that it can also perform other functions.

5.2.1.2 Problems with the polyfunctional approach

The trouble with earlier polyfunctional analyses of οὕτως's meaning (under which they would fall somewhere on the resumptive/progressive/inferential spectrum) is not necessarily that they do not cover all instances.¹⁵ The problem is that its meaning has become unnecessarily fragmented – divided among three distinct functions (resumptive, progressive and inferential) which can, I will argue, be subsumed under

¹⁵ I use 'polyfunctional' instead of 'polysemous' here because I am not sure that all analysts which fall under this heading would agree that οὕτως is polysemous – they may argue that it encodes one semantic entry which can be modified across contexts (which would preclude οὕτως from being procedural – see §2.3.2.2). The weaker 'polyfunctional' makes fewer assumptions on this account.

the heading of mutual manifestness. Indeed, just about every example of οὖν utterances in my corpus can be described as either resumptive (11-13), progressive (including what would be considered POP utterances on a coherence account) (14-16) or inferential (17-21):¹⁶

(11) Τὴν δὲ μέσῃν χώρῃν μὴ ἀποκληρωτικῶς τὴν γῆν, μηδὲ ἐκ τοῦ αὐτομάτου λαχεῖν, ἀλλὰ φυσικῇ εἶναι ταύτην τῇ γῇ καὶ ἀναγκαίαν τὴν θέσιν. Τοῦ γάρ¹⁷ οὐρανίου σώματος τὴν ἐσχάτην χώρῃν ὡς πρὸς τὸ ἄνω κατέχοντος, ἅπερ ἄν, φησὶν, ὑποθώμεθα βάρη ἐκπίπτειν ἀπὸ τῶν ἄνω, ταῦτα πανταχόθεν ἐπὶ τὸ μέσον συνενεχθήσεται. Ἐφ' ὅπερ δ' ἄν τὰ μέρη φέρεται, ἐπὶ τοῦτο καὶ τὸ ὅλον συνωσθήσεται δηλονότι. Εἰ δὲ λίθοι καὶ ξύλα καὶ τὰ γεηρὰ πάντα φέρεται πρὸς τὸ κάτω, αὕτη ἄν εἴη καὶ τῇ ὅλῃ γῇ οἰκεῖα καὶ προσήκουσα θέσις· κἄν τι τῶν κούφων φέρεται ἀπὸ τοῦ μέσου, δηλονότι πρὸς τὸ ἀνώτατον κινηθήσεται. Ὡστε οἰκεῖα φορὰ τοῖς βαρυτάτοις ἢ πρὸς τὸ κάτω· κάτω δὲ ὁ λόγος μέσον ἔδειξεν. Μὴ οὖν θαυμάσης εἰ μηδαμοῦ ἐκπίπτει ἡ γῆ, τὴν κατὰ φύσιν χώρῃν τὸ μέσον ἔχουσα. (Bas. Hex. I.10.7-20)

[Basil is presenting the position of his opponents on why the Earth is an immobile sphere.] “(It is not, they go on,) **without reason or by chance that the earth occupies the center of the universe. It is its natural and necessary position.** As the celestial body occupies the higher extremity of space all heavy bodies, they argue, that we may suppose to have fallen from these high regions, will be carried from all directions to the center, and the point towards which the parts are tending will evidently be the one to which the whole mass will be thrust together. If stones, wood, all terrestrial bodies, fall from above downwards, this must be the proper and natural place of the whole earth. And if a light body is separated from the centre, it is evident that it will ascend towards the higher regions. Thus heavy bodies move from the top to the bottom, and following this reasoning, the bottom is none other than the center of the world. Do not [*oun*] be surprised if the world never falls: it occupies the center of the universe, its natural place.”

¹⁶ For other resumptive examples, see e.g. Bas. Hex. I.2.38, I.6.1, II.8.60, III.8.18, IV.2.27, V.8.1, VIII.2.9, VIII.7.9 and IX.6.90; Greg. Iul. I.545.40, II.672.16, II.672.39 and II.700.11; Hel. Aeth. 1.15.5.3, 2.4.2.4, 5.8.3.1, 5.18.5.1-2, 6.5.1.5, 7.16.1.1, 7.19.4.4, 10.16.5.4 and 10.41.3.1. For other progressive examples, see e.g. Bas. Hex. II.5.50, III.2.8 and III.3.51; Greg. Iul. I.577.13, I.601.17, II.696.7 and II.700.21; Hel. Aeth. 1.4.1.1, 2.3.3.1, 4.5.2.4, 5.8.1.2, 7.5.3.1, 7.16.1.6, 9.25.4.6 and 10.4.6.1. For other inferential examples, see e.g. Bas. Hex. VI.3.5, VI.11.32, VII.3.7, VII.4.13, VII.6.7, VIII.8.20, IX.6.13 and IX.6.100; Greg. Iul. I.645.4, I.661.7, II.665.31, II.665.36 and II.717.19; Hel. Aeth. 1.21.2.6, 2.11.5.1, 3.11.2.6, 4.6.5.2, 5.6.4.1, 5.31.3.7, 7.21.3.6, 7.25.1.1, 8.7.6.2, 9.20.5.1, 10.23.3.4, 10.34.5.2 and 10.37.2.2. Some of these examples will be discussed in detail later on.

¹⁷ This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand.

The οὖν utterance recaps information which Basil had already provided – the Earth occupies the center of the universe φυσικὴν εἶναι ταύτην τῇ γῇ καὶ ἀναγκαίαν τὴν θέσιν (‘as its natural and necessary position’; in bold). This assumption is followed by the line of thought behind this assumption (heavy bodies fall downwards, and the resulting accretion of mass forms the center of the world), and then the οὖν utterance, where Basil communicates the original assumption in directive form – his audience shouldn’t be surprised that the world never falls, as it occupies the center of the universe, which is its natural place (τὴν κατὰ φύσιν χώραν). The οὖν utterance, then, takes up information which had already been presented.

(12) Μαρτύρων τε μνήμασι πολυτελεστάτοις, καὶ ἀναθημάτων φιλοτιμίαις, καὶ πᾶσιν οἷς ὁ θεῖος φόβος χαρακτηρίζεται, τὸ φιλόσοφον καὶ φιλόχριστον κατεμήνου· ὁ μὲν, καὶ **κατ’ ἀλήθειαν εὐσεβῶν**· καὶ γὰρ¹⁸ ἦν, εἰ καὶ τὴν φύσιν θερμότερος, ἀλλ’ οὖν γνήσιος εἰς εὐσέβειαν, [...]. (Greg. *Iul.* I.552.18-23)

[Gregory is comparing the merits of Gallus with those of his half-brother Julian:] “By most sumptuous monuments to martyrs, and by their love for distinction in their offerings, by all the other marks by which the fear of God is characterized, did they make known their love of wisdom and their love of Christ: the one of them [i.e., Gallus, SZ] also **being also sincerely pious**; for he was, although too hasty in temper, nevertheless [*oun*] genuine in his piety; [...].”

Here, the οὖν utterance (γνήσιος εἰς εὐσέβειαν, or ‘he was genuine in his piety’) just recaps κατ’ ἀλήθειαν εὐσεβῶν (‘[Gallus] was sincerely pious’) – again a clear example of ‘resumptive’ οὖν.

(13) Κάπειδὴ τοῦ συνεδρίου πλησίον ἐγεγόνει, πρὸς τὸν Θεαγένην βλέψας ὁ Ὑδάσπης καὶ ἐλληνίζων «ὦ ξένε» ἔφη «τούτῳ σε χρή διαγωνίσασθαι· ὁ δῆμος κελεύουσι.» «Γινέσθω τὸ δοκοῦν» ὁ Θεαγένης ἀπεκρίνατο. «Ἀλλὰ τίς ὁ τρόπος τῆς ἀγωνίας;» «**Πάλης**» εἶπεν ὁ Ὑδάσπης. Καὶ ὅς «Τί δὲ οὐχὶ καὶ ξιφῆρης καὶ ἔνοπλος, ἵνα τι ῥέξας ἢ παθὼν ἐκπλήσω Χαρίκλειαν, τὴν σιωπᾶν εἰς δεῦρο τὰ καθ’ ἡμᾶς καρτεροῦσαν, ἢ καὶ εἰς τέλος, ὥς ἔοικεν, ἡμῶν ἀπεγνωκυῖαν;» Καὶ ὁ Ὑδάσπης «Τί μὲν βούλεταί σοι» εἶπε «τὸ παραπλέκειν ὄνομα Χαρικλείας αὐτὸς ἂν γινώσκεις· παλαίειν δ’ οὖν σε καὶ οὐ ξιφῆρη πυκτεύειν χρεών. (Hel. *Aeth.* 10.31.1.1-10.31.2.4)

¹⁸ This is an interesting γὰρ utterance. It ‘unpacks’ the preceding assumption in that it qualifies how Gallus’ ‘sincere piety’ should be understood – his piety should be seen against his ‘hasty temper’. As such, it provides an additional assumption which will lead the hearer to modify his interpretation of Gallus’ piety.

[The Ethiopian people want Theagenes to ‘contend’ (διαγωνιζέσθω, 10.30.7.8) with a gigantic Ethiopian athlete:] “When the man had drawn near to the royal circle Hydaspes looked towards Theagenes and said in Greek: ‘Stranger, you must contend with him; the people demand it.’ ‘Their will be done,’ replied Theagenes, ‘but what kind of contest is it to be?’ **‘Wrestling,’** said Hydaspes. To which Theagenes said: ‘Why not a combat with swords and in armour, that by some great stroke given or received I may thrill Chariclea, her who has up until now maintained a steady silence about me, nay, has utterly dismissed me, it would seem, from her thoughts?’ ‘For what purpose,’ said Hydaspes, ‘you drag in the name of Chariclea may be known to yourself; but it is in wrestling [*oun*] and not in dueling with swords that you have to contend.’”

As in the previous two examples, the οὖν utterance harks back to an assumption which had already been communicated – Hydaspes had already informed Theagenes that he would have to contend in wrestling (πάλης; in bold). Note the collocation of οὖν with δέ, to which I will turn later on.

(14) Καὶ Πνεῦμα Θεοῦ, φησὶν, ἐπεφέρετο ἐπάνω τοῦ ὕδατος. Εἴτε τοῦτο λέγει τὸ πνεῦμα, τοῦ ἀέρος τὴν χύσιν, δέξαι τὰ μέρη τοῦ κόσμου καταριθμοῦντά σοι τὸν συγγραφέα, ὅτι ἐποίησεν ὁ Θεὸς οὐρανὸν, γῆν, ὕδωρ, ἀέρα, καὶ τοῦτον χεόμενον ἤδη καὶ ῥέοντα. Εἴτε, ὃ καὶ μᾶλλον ἀληθέστερόν ἐστι καὶ τοῖς πρὸ ἡμῶν ἐγκριθέν, Πνεῦμα Θεοῦ, τὸ ἅγιον εἴρηται· διὰ τὸ τετηρήσθαι τοῦτο ἰδιαζόντως καὶ ἐξαιρέτως τῆς τοιαύτης μνήμης ὑπὸ τῆς Γραφῆς ἀξιοῦσθαι, καὶ μηδὲν ἄλλο Πνεῦμα Θεοῦ, ἢ τὸ ἅγιον τὸ τῆς θείας καὶ μακαρίας Τριάδος συμπληρωτικὸν ὀνομάζεσθαι. Καὶ ταύτην προσδεξάμενος τὴν διάνοιαν, μείζονα τὴν ἀπ’ αὐτῆς ὠφέλειαν εὐρήσεις. Πῶς οὖν ἐπεφέρετο τοῦτο ἐπάνω τοῦ ὕδατος; (Bas. Hex. II.6.1-13)

[Basil continues his discussion of a verse from Genesis:] “‘And the Spirit of God,’ Scripture says, ‘was borne upon the face of the waters.’ Does this spirit mean the diffusion of air? The sacred writer wishes to enumerate to you the elements of the world, to tell you that God created the heavens, the earth, water, and air and that the last was now diffused and in motion; or rather, that which is truer and confirmed by the authority of the ancients, by the Spirit of God, he means the Holy Spirit. It is, as has been remarked, the special name, the name above all others that Scripture delights to give to the Holy Spirit, and nothing else is meant by the spirit of God the Holy Spirit, than the Spirit which completes the divine and blessed Trinity. And you will find it to be more helpful to take it in this sense. How [*oun*] did the Spirit of God move upon the waters?”

Basil, with the οὖν utterance, proceeds from a discussion of how ‘spirit’ (πνεῦμα) should be interpreted in Genesis – not as the element of air, but as the Holy Spirit – to a discussion of how the Holy Spirit’s movement (ἐπεφέρετο) should be interpreted. As such, the οὖν utterance could be taken to mark a ‘new step’ in Basil’s homily.

(15) Καὶ τὸ καλλιέρημα ὡς μέγα καὶ ὑπερφυῆς, ὦ Χριστέ, καὶ Λόγε, καὶ πάθη τοῦ ἀπαθοῦς, καὶ κόσμου παντὸς μυστήριον! ὅλον τὸ Χριστιανῶν γένος παραστῆναι τοῖς δαίμοσιν, εἰ τοῦ προκειμένου κρατήσῃ. Τὰ μὲν οὖν πρῶτα τῆς ἐγχειρήσεως αὐτῷ, καὶ λίαν νεανικὰ, καὶ πολλοῖς τῶν τὰ ἐκείνου φρονούντων περιβοώμενα ταῦτα. (Greg. Iul. II.676.2-8)

[Julian was hell-bent on destroying Christianity, according to Gregory:] “And his vow, how great and monstrous a thing (O Christ, and Word, and Passion of the impassive, Mystery of all creation!) – it was to subjugate the whole Christian family to obedience of his demons, as soon as he had accomplished the business in hand! The [oun] first steps in his enterprise, both excessively impetuous and much celebrated by those of his own party, were as follows.”

The οὖν utterance here explicitly marks a new step. Gregory has just introduced Julian’s vow (τὸ καλλιέρημα) to ‘subjugate the whole Christian family to obedience to his own demons’ (ὅλον τὸ Χριστιανῶν γένος παραστῆναι τοῖς δαίμοσιν) – the οὖν utterance begins his discussion of how he wanted to implement this plan, with τὰ μὲν πρῶτα (‘the first things’) making very clear that we have advanced from a general estimation of Julian’s vow to its concrete realization.

(16) Ἦδη δὲ τῆς ἄγαν μεσημβρίας χαλώσης οὐκέτι κατὰ κορυφὴν ἡλίου πλάγια δὲ καὶ ἀπὸ τῶν δυσμικωτέρων βάλλοντος τῶν τε περὶ τὸν Βαγῶαν εἰς τὴν πορείαν διασκευαζομένων ἐφίσταται τις ἱππεὺς [...] καὶ πρὸς τὸν Βαγῶαν ἰδίᾳ τι φράσας ἡσύχαζεν. Ὁ δὲ εἰς βραχὺ κατηφῆσας καὶ ἐν συννοίᾳ τῶν ἀπαγγελθέντων γεγονέναι δόξας «ᾧ ξένοι» ἔφη «θαρσεῖτε. Δίκην ὑμῖν ὑπέσχετο ἡ πολεμία· τέθηκεν Ἀρσάκη βρόχον ἀγχόνης ἀψαμένη ἐπειδὴ τὴν ἡμετέραν σὺν ὑμῖν ἔξοδον ἐπύθετο [...]. Ἐχαιρον δὲ καὶ οἱ περὶ τὸν Θεαγένην τῇ ἀκοῇ, θεοὺς τε καὶ δίκην μεγάλους ἀνακαλοῦντες οὐδὲν ἔτι πείσεσθαι δεινὸν ὑπετίθεντο κἂν εἰ τὰ χαλεπώτατα διαδέχοιτο, τῆς ἐχθίστης κειμένης. Οὕτως ἄρα ἡδὺ τισι καὶ τὸ ἀπόλλυσθαι ὅταν συμβαίνει τοῖς ἐχθροῖς ἐπαπόλλυσθαι. Δείλῃς οὖν ὀψίας ἤδη πρὸς τὸ εὐπνούστερον ἀναχεομένης καὶ πρὸς τὸ βάσιμον τὴν ὁδοιπορίαν ἐπιψυχούσης ἄραντες ἤλαυνον αὐτήν τε τὴν ἐσπέραν καὶ τὴν συνεχῇ νύκτα καὶ τῆς συναπτομένης ἡμέρας τὰ ὄρθρια σπουδὴν ποιούμενοι κατὰ τὰς θήβας τὸν Ὀροονδάτην εἰ δύναιτο καταλαβεῖν. (Hel. Aeth. 8.15.1.1-8.15.6.5)

[Bagoas has come to take Theagenes and Chariclea from Arsace and bring them to Thebes.] “The excessive midday heat was now abating, for the sun, no longer standing at the zenith, was sending its rays aslant from the occidental quarter. Bagoas and his men were completing their preparations for proceeding on their journey when a horseman arrived [...] and went aside with Bagoas, spoke some words to him and then took his rest. Bagoas stood for a moment pensive, his mind apparently engrossed by the news that he had received. ‘You strangers’, he said, ‘be comforted. Your enemy has paid the penalty: Arsace is dead, having hanged herself in a strangling noose as soon as she heard of our

departure with you' [...]. Theagenes and Chariclea also rejoiced when they heard the news: they acclaimed the might of the gods and of justice, feeling sure that they had no longer any calamity to fear, even should the greatest hardships await them, now that their worst enemy was laid low. So it is that some persons find it pleasant even to perish, if they can see their enemies perish with them. The afternoon [*oun*] had now become late, and with their extension came a rising breeze that brought some coolness to speed wayfarers on their journey. The party made a start, and rode during that evening and all through the ensuing night and the morning of the next day, making haste to reach Thebes to find Oroondates there, if they could."

The οὖν utterance again marks a new step – this time not in the speaker's argumentation, but in the narrative. This transition is temporal in nature, being introduced by a reference to the 'afternoon' being 'late' (δείλης ὀψίας ἤδη). In addition, the οὖν utterance amounts to a break in the narrative, with the protagonists in this scene packing up and leaving their camp to continue on their journey to Thebes. As a result, οὖν here could be considered 'progressive' – if such a thing as 'progressive οὖν' exists, of course.

Οὖν also occurs with inferences. In some cases, the inference is almost explicit:

(17) «Τὰ πάτρια τελείσθω» τῶν περιεστώτων ἐκβοώντων, «ἡ νενομισμένη θυσία λοιπὸν ὑπὲρ τοῦ ἔθνους τελείσθω, αἱ ἀπαρχαὶ τοῦ πολέμου τοῖς θεοῖς προσαγέσθωσαν.» Συνεῖς οὖν ὁ Ὑδάσπης ὅτι τὴν ἀνθρωποκτονίαν ἐπιζητοῦσιν, ἦν ἐπὶ ταῖς κατὰ τῶν ἀλλοφύλων νίκαις μόναίς ἐκ τῶν ἀλίσκομένων ἐπιτελεῖν εἰώθεσαν. (Hel. Aeth. 10.7.1.3-10.7.2.4)

[The Ethiopians are preparing the usual sacrifice to their gods for their victory against the Persians.] "The traditional ceremonies must be carried out!", was the clamour of the people standing around; 'The customary sacrifice must now finally be offered for the nation's good; the first-fruits of the war must be presented in oblation to the gods!' Hydaspes understood [*oun*] that they were demanding the human sacrifice which it was their custom to perform, though only on occasions of victory over a foreign enemy, with victims taken from those taken prisoner."

From the words of the spectators (in particular, the 'customary sacrifice' or νενομισμένη θυσία they call for), Hydaspes can infer (συνεῖς, 'he understood') that they are asking for the customary human sacrifice (τὴν ἀνθρωποκτονίαν). As the audience had let out 'a confused, disorderly cry' (βοή [...] συμμιγῆς τε καὶ ταραχώδης) when the customary animals were being led before the altar, it can be presumed that they do not

want those sacrifices to be fulfilled – those were slated to be performed anyway. Instead, Hydaspes infers that the Ethiopians are impatient for the main event, i.e., the human sacrifice.¹⁹

(18) Τί μακράν ἀποτρέχεις τῆς ἀληθείας, ἄνθρωπε, ἀφορμὰς σεαυτῷ τῆς ἀπωλείας ἐπινοῶν; Ἀπλοῦς ὁ λόγος, καὶ πᾶσιν εὐληπτος. Ἀόρατος ἦν ἡ γῆ, φησί. Τίς ἡ αἰτία; Ἐπειδὴ ἄβυσσον εἶχεν ἐπιπολάζουσαν ἑαυτῇ. Ἀβύσσου δὲ ἔννοια τίς; Ὑδωρ πολὺ δυσέφικτον ἔχον ἑαυτοῦ τὸ πέρας ἐπὶ τὸ κάτω. Ἀλλ’ ἐγνωμεν πολλὰ τῶν σωμάτων καὶ δι’ ὕδατος λεπτοτέρου καὶ διαυγοῦς πολλάκις διαφαινόμενα. Πῶς οὖν οὐδὲν μέρος τῆς γῆς διὰ τῶν ὑδάτων ἐδείκνυτο; (Bas. Hex. II.4.22-30)

[Basil is arguing against those who see the ‘dark’ in Genesis as an allegory for evil.] “Why wander far from the truth, man, and imagine for yourself that which will cause your perdition? The word is simple and within the comprehension of all. ‘The earth was invisible’. What is the cause? Because the deep was spread over its surface. What is the meaning of the deep? A mass of water of which the lower border is hard to reach. But we know that we can see often many bodies even through clear and transparent water. How [oun] was it that no part of the earth appeared through the water?”

The οὖν utterance here contains another straightforward inference. If ‘the deep’ (ἄβυσσος) is a mass of water of extreme depth (ὕδωρ πολὺ δυσέφικτον ἔχον ἑαυτοῦ τὸ πέρας ἐπὶ τὸ κάτω), and if we can see bodies through water, how was the Earth invisible? The answer is that there wasn’t any light yet – but the rhetorical question arises inferentially from the preceding premises.²⁰

(19) Ἐπειτα πῶς ἐκεῖνο οὐ λογίζῃ, ὃ σοφώτατε πάντων καὶ συνετώτατε, ὁ πρὸς τὸ τῆς ἀρετῆς ἄκρον συγκλείων Χριστιανούς, ὅτι τῆς ἡμετέρας νομοθεσίας τὰ μὲν ἀνάγκην ἔχει τοῖς ἐπιταττομένοις, ἃ καὶ μὴ φυλάττουσι κίνδυνος• τὰ δὲ οὐκ ἀνάγκην, αἴρεσιν δέ• ἃ φυλάττουσι μὲν, τιμὴν καὶ ἀντίδοσιν, μὴ φυλάττουσι δέ, οὐδ’ ὄντιν’ οὖν κίνδυνον; (Greg. Iul. I.633.21-28)

¹⁹ For other examples with συνεῖς – which points to ratiocination and hence some sort of inference – see e.g. Hel. Aeth. 10.31.2.5; 3.11.2.5 for an instance with direct speech. Another example will be discussed below, in (55).

²⁰ It is certainly not uncommon for οὖν to appear with questions – as in (18), these questions are rhetorical, aimed at introducing a problem which may arise from preceding assumptions. See also (31) *infra*, as well as e.g. Bas. Hex. III.5.22, IV.6.27 and V.5.8; Greg. Iul. I.569.15, I.636.24 and II.672.16; Hel. Aeth. 1.21.2.6, 4.7.5.3 and 5.6.4.1. I will not discuss these instances separately, as οὖν’s function in these examples does not differ in any interesting way from other instances – it still marks mutually manifest assumptions, just in the form of a (rhetorical) question and not a simple assertion.

[Gregory is discussing how Julian didn't know as much about Christian principles as he thought he did.] “And then how comes it that you do not consider this circumstance, you wisest of all men, and most knowing, you who confines the Christians within the strictest limit of virtue – that in our code of laws some rules carry with them the necessity of obedience to their injunctions; and which, if not observed, lead to danger; whereas others do not carry with them obligation, but voluntary obedience – which, for those who observe them, lead to honor and reward; while for those who do not observe them, [*oun*] no punishment whatsoever follows.”

If rules are voluntary (ἄρῃσιν), it is obvious that no punishment will come for those who do not observe them. If we assume that οὖν can point to inferences, Gregory marks ‘no punishment whatever [follows]’ (οὐδ’ ὄντινα κίνδυνον) with οὖν here because he wants to indicate that this assumption follows inferentially from preceding and commonly acceptable assumptions (namely, that a failure to follow voluntary rules should not lead to punishment).

(20) Δέος δὲ διαφθαρήναι μὲν καταμείναντας λιμῷ διαφθαρήναι δὲ ἐφόδῳ τινῶν ἦτοι τῶν ἐναντίων πάλιν ἐλθόντων, ἢ καὶ διὰ τῶν σὺν ἡμῖν γεγονότων, εἰ καθ’ ἓν ποτε συλλεγέμεντες καὶ τὸν ἐνθάδε θησαυρὸν οὐκ ἀγνοοῦντες ἐπέλθοιεν διὰ τὰ χρήματα· τότε οὐκ ἂν φθάνοιμεν παραπολλύμενοι ἢ ταῖς ὕβρεσι ταῖς ἐκείνων τὸ φιλανθρωπότερον ἐκκείμενοι. Ἄλλως τε γὰρ²¹ ἄπιστον τὸ βουκόλων γένος καὶ νῦν πλέον ὅτε τοῦ καταστέλλοντος τὴν γνώμην πρὸς τὸ σωφρονέστερον ἄρχοντος ἀμοιροῦσιν· Ἀπολειπτόν οὖν ἡμῖν καὶ φευκτέον ὡς ἄρκυς τινὰς καὶ δεσμωτήριον τὴν νῆσον, [...]. (Hel. Aeth. 2.21.3.1-2.21.4.5)

[Cnemon is proposing a plan for fleeing the brigands' island:] “There is a danger of perishing, if we stay on here, from starvation; or of perishing in an onslaught either of the enemy, should they return to the attack, or even of the band with whom we were, if they should join up together again and, not being unmindful of the treasure hidden here, come in search of this wealth. In that event we should inevitably be destroyed out of hand, or exposed to their maltreatment, if some humaner feeling prevailed. For in general these herdsmen are a faithless kind, and more so than ever now, when they are deprived of the leader who restrained their minds to more temperate measures. We must abandon [*oun*] this island, and flee it as we would some snare or jail, [...].”

²¹ This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – in this case, it provides information about why Cnemon thinks they would suffer at the hands of the brigands.

The inference marked by οὖν is again easy to recover: the island on which they are currently present has no food and there's a reasonable chance that they'll be captured by some group of brigands if they stay there. As such (οὖν), they should leave the island.

In some cases, the premise for the inference follows the οὖν utterance (see also (8) *supra*):

(21) εἰς ἀλεκτρονίων ὥδ' αὖς τετελευτηκότα γνωσθῆναι, τῶν παίδων ἐξ ὧν προὔλεγεν ὁ πρεσβύτερος παννύχιον παρατηρούντων. «Καὶ νῦν» ἔφη «διεπεμψάμεθα τοὺς μετακαλέσοντας τὸ λοιπὸν τῶν κατὰ τὴν πόλιν προφητικὸν τε καὶ ἱερατικὸν γένος, ὡς ἂν τὰ νομιζόμενα ἐπ' αὐτῷ τῆς κηδείας κατὰ τὸν πάτριον νόμον τελοῖεν. Ἀποχωρητέον οὖν ὑμῖν, οὐ γάρ²² θέμις μὴ ὅτι γε θύειν ἄλλ' οὐδὲ ἐπιβαίνειν τοῦ νεώ πλην τοῖς ἱερωμένοις ἐπὶ τούτων ὅλων τῶν ἐχομένων ἡμερῶν.» (Hel. Aeth. 7.11.4.9-7.11.5.7)

[Cybele has arrived at the temple of Isis in Memphis; she is informed that Calasiris has died.] “At cock-crow it was discovered that he was dead, while his sons were keeping night-long watch over the old man on the hint of his warning. ‘And now,’ said the sacristan, ‘we have issued a summons for the attendance of the rest of the prophets and priests in the town, that they may conduct his funeral with the customary rites of their ancestral tradition. You must depart [*oun*], as it is not right that anyone should offer sacrifice or even set foot in the temple except the persons invested with the holy functions, during these seven whole days succeeding the decease.’”

The premise which forms the basis of the inference is contained within the γάρ utterance which follows the οὖν utterance – if only those invested with the holy functions (τοῖς ἱερωμένοις) are allowed to enter the temple, Cybele will be turned away.

Some examples could be considered to lie somewhere between ‘inferential’ οὖν and ‘progressive’ οὖν (22), or between ‘resumptive’ οὖν and ‘progressive’ οὖν (23) – which indicates that the different uses which have been proposed actually should be considered to blend into one another:

(22) Τὸ δὲ ὅποι παραπεμπτόν αὐτοὺς μίαν μόνην λύσιν εὑρίσκον, εἴ πη δυνηθείην ἐπιτυχεῖν τῆς συνεκτεθείσης τῇ Χαρικλείᾳ ταινίας, ἐν ᾗ τὸ κατ' αὐτὴν διήγημα κατεστήχθαι ὁ Χαρικλῆς ἀκηκοὺς ἔλεγεν· εἰκὸς γάρ²³ εἶναι καὶ πατρίδα καὶ τοὺς

²² This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – in this case, it provides information about why the sacristans think Cybele should leave.

²³ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – in this case, it provides information about why Calasiris thinks the swathe will solve his problem of where to lead Theagenes and Chariclea.

ὑπονοηθέντας ἤδη παρ' ἐμοὶ γεννήτορας τῆς κόρης ἐντεῦθεν ἐκμαθεῖν καὶ ἴσως ἐκεῖ πέμπεσθαι αὐτοὺς ὑπὸ τῆς εἰμαρμένης. Ὁρθριος οὖν παρὰ τὴν Χαρίκλειαν ἤκων ἄλλους τε τῶν οἰκείων καταλαμβάνω δεδακρυμένους καὶ οὐχ ἥκιστα τὸν Χαρίκλέα. (Hel. Aeth. 4.5.1.1-4.5.2.3)

[Calasiris has heard from an oracle that he should take Theagenes and Chariclea to 'the land of the Sun', but he doesn't know where this is exactly.] "For the problem of where I should conduct them I could see but one solution – if somehow I could discover the swathe which was exposed with Chariclea, and on which was embroidered the story about her, as Charicles said he had been told; for it was likely that I should ascertain from it what the girl's country was, and who were the parents already guessed at by me as hers; and maybe it was there that the young people were being sent by Destiny. At an early hour [oun] I went to see Chariclea; I found the whole household in tears, especially Charicles."

The οὖν utterance could be taken to be 'inferential' (Calasiris' decision to go see Chariclea follows from the premise presented in the preceding utterance – i.e., the fact that he needs to see her swathe); however, it is also 'progressive' in that it amounts to a transition to a next part of the narrative – Calasiris' ruminations in the utterance preceding the οὖν utterance lead to this next step, in which he goes to Chariclea's house.

(23) Ἐπεὶ δὲ τὰ πράγματα ἐκινήθη Χριστιανοῖς, καὶ τὰ τῶν Ἑλλήνων φλεγμαίνειν ἤρξατο, τὴν τοῦ καιροῦ δυναστείαν οὐκ ἔφυγε. Φιλοῦσι γάρ²⁴ οἱ δῆμοι, κὰν πρὸς τὸ παρὸν κατάσχωσι τὰς ὀργάς, ὥσπερ πῦρ ἐμφωλεῦον ὕλαις, ἢ ῥεῦμα βία κρατούμενον, εἰ καιροῦ λάβοιντο, ἀνάπτεσθαί τε καὶ ἀναρρήγνυσθαι. Ὅρων οὖν τὴν τοῦ δήμου κίνησιν ἐπ' αὐτὸν, οὐδὲν μέτριον ἢ ἐννοούντων, ἢ ἀπειλούντων, τὰ μὲν πρῶτα δρασμὸν βουλεύεται, οὐ δι' ἀνανδρίαν μᾶλλον ἢ τὴν φεύγειν ἐκ πόλεως εἰς πόλιν κελεύουσιν ἐντολήν, καὶ ὑποχωρεῖν τοῖς διώκταις, [...]. (Greg. Iul. I.617.9-20)

[Gregory has just introduced Marcus, the bishop who was to be tortured by a crazed mob of pagans.] "When the power of the Christians was shaken, and that of the heathens began to revive, Marcus did not escape the tyranny of the times; for the mob loves to – although it may keep under its passions for the present, like a fire smouldering amongst sticks, or a torrent dammed up by force –, when it gets an opportunity, to blaze up and burst forth. Seeing [oun] the commotion of the people

²⁴ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – in this case, it provides a general rumination about the nature of mobs.

against him, who were intending or threatening nothing measured, at first he meditates making his escape, not out of cowardice, but rather on account of the commandment bidding one to flee from one city to another city, and give way unto the persecutors; [...].”

The οὖν utterance introduces a ‘new step’ (Marcus’ reaction to the threat posed by the pagan mob). At the same time, it is clearly resumptive: the οὖν utterance starts from information which has already been divulged – we already know that Marcus was being threatened by the ‘people’ (τὴν τοῦ δήμου κίνησιν ἐπ’ αὐτόν), as Gregory had told us that Marcus ‘did not escape the tyranny of the times’ (τὴν τοῦ καιροῦ δυναστείαν οὐκ ἔφυγε).

A couple of points should be kept in mind from this discussion. The first is that οὖν does indeed mark utterances which could be taken to be ‘resumptive’, ‘progressive’ or ‘inferential’ in my corpus of texts. The second is that these uses often cannot be categorically distinguished from each other – ‘new steps’ often take off from information which had already been made manifest and are, hence, at least somewhat resumptive²⁵; ‘new steps’ can often be considered to be inferential as well.²⁶ Moreover, inferences rely on assumptions made available previously, and could hence be considered to be ‘resumptive’ in the way they are derived (cf. Hansen 1997: 168-9). If, then, all three functions apply to the texts under consideration, but none of them suffice on their own to explain every οὖν utterance, and if these functions cannot be separated from each other completely, the most logical reaction would be to tie all three proposed functions together in a unitary semantic analysis. By looking under the hood of the three functions proposed in the secondary literature, we will see that they are actually three ways of manifesting the same core meaning – that is, mutual manifestness.²⁷

Another, more glaring problem with polyfunctional accounts of οὖν should be familiar from the preceding chapters on δέ and γάρ. While the contexts in which οὖν appears have been described adequately (much more so than those in which δέ and γάρ occur, to my mind), these accounts, like those of δέ and γάρ, still remain stuck in second gear – analyzing the contexts in which οὖν occurs more than οὖν’s contribution itself. In other words, the contexts in which οὖν appears have been investigated sufficiently,

²⁵ See also e.g. (14) *supra* and Bas. *Hex.* I.2.38 (which is very similar to (14)), III.8.18, IV.2.27, VIII.2.9; Hel. *Aeth.* 5.8.3.1, 7.16.1.1 and 10.41.3.1.

²⁶ See e.g. Bas. *Hex.* II.5.50, VII.3.7 and VII.6.7; Greg. *Iul.* I.577.13 and II.665.36; Hel. *Aeth.* 2.11.5.1, 7.16.1.6 and 9.20.5.1.

²⁷ Note also that the polyfunctional approach cannot deal straightforwardly with examples like (9) and (10), which do not fall comfortably under any of the three options proposed.

but this important taxonomic step has not been fashioned into a properly semantic analysis. Here, I aim to develop a unitary semantic account of οὖν's meaning which is in line with relevance-theoretic assumptions about mutual manifestness.

5.2.2 Procedurality

First, however, let's take a look at whether οὖν can be considered to be procedural. The analysis here is in line with the earlier discussions of δέ's and γάρ's procedurality, and can hence be brief. It is clear that οὖν has been introspectively inaccessible to many, if not all scholars – this is evidenced not just by the fact that it is often described in terms of what it does instead of what it means, but also by the plethora of different functions assigned to it by different people. It has also been found to be difficult to translate, which also points in the direction of introspective inaccessibility (Clark 2013: 324). While οὖν can often be translated as *so* (see e.g. (17), (20) and (21)), it can also be represented as *then* (e.g. (14), (18) and (23)) or *now* (e.g. (26)), or just left untranslated (e.g. (19) and (32)). There are also examples where no word-to-word translation seems to fit (see e.g. (15)). The point is that, as with δέ and γάρ, there is no word-to-word translation which suits the varied contexts in which οὖν occurs. As will become clear later on, οὖν can also be analyzed non-compositionally where it occurs with other DMs (such as δέ or γάρ) – given Grice's Modified Occam's Razor, this more parsimonious approach would seem preferable (see also (31) in §3.2.2). Moreover, like δέ and γάρ, it cannot occur with straightforwardly conceptual items, as e.g. *but* can ('but, and this is a big but...' – see example (52) in chapter 2). Non-compositionality, as mentioned, would also point to procedurality. As to rigidity and non-polysemy, they are, as has been stated multiple times, difficult to assess for dead languages – but I aim to demonstrate that the different functions proposed for οὖν can be folded into one another, and that a non-polysemous approach to its meaning is certainly viable.²⁸

²⁸ On a somewhat related note, instances like the following (discussed in (20) *supra*) may cast doubt on the implicit assumption maintained in coherence accounts (and my own) that οὖν is straightforwardly non-truth-conditional:

(20') Δέος δὲ διαφθαρήναι μὲν καταμείναντας λιμῷ διαφθαρήναι δὲ ἐφόδῳ τινῶν ἥτοι τῶν ἐναντίων πάλιν ἐλθόντων, ἢ καὶ διὰ τῶν σὺν ἡμῖν γεγονότων [...]. Ἀπολειπτέον οὖν ἡμῖν καὶ φευκτέον ὡς ἄρκυς τινὰς καὶ δεσμοτήριον τὴν νῆσον, [...]. (Hel. *Aeth.* 2.21.3.1-2.21.4.5)

[Cnemon is proposing a plan for fleeing the brigands' island:] "There is a danger of perishing, if we stay on here, from starvation; or of perishing in an onslaught either of the enemy, should they return to the attack, or even of the band with whom we were [...]. We must abandon [*oun*] this island, and flee it as we would some snare or jail, [...]."

5.2.3 Folding the different contexts into one: $\text{o}\check{\text{v}}$ and mutual manifestness

In this section, I will look at the three different functions proposed for $\text{o}\check{\text{v}}$ ('resumptive', 'progressive' – under which, as stated, the POP use would fall – and 'inferential'). I will argue that these functions are all derivative of $\text{o}\check{\text{v}}$'s meaning, which is to suggest that the upcoming assumption is mutually manifest. Mutual manifestness is a relevance-theoretic notion, and refers to those assumptions which are part of the mutual cognitive environment – i.e., the set of contextual assumptions which are manifest to both speaker and hearer (and of which it is manifest to both speaker and hearer that they are manifest to both). 'Resumptive' $\text{o}\check{\text{v}}$ marks assumptions which have

Compare this instance to Wilson's example of *so* in (27) in §1.1.3.2 *supra*:

'If the council fails to repair a pothole and so you break your leg, you should sue.' (from Wilson 2016: 9)

As Wilson (*ibid.*) points out, 'so' is truth-conditional here – that is, the proposition is true only if the speaker's interlocutor sues if she broke her leg *as a direct consequence* of the council's failure to repair the pothole. Something similar is true for (20') – this can be tested by embedding the proposition marked by $\text{o}\check{\text{v}}$ under a standard scope test (see e.g. Rouchota 1990: 71):

(20'') If there is a danger of perishing, if we stay on here, from starvation; or of perishing in an onslaught either of the enemy, should they return to the attack, or even of the band with whom we were, and we [oun] abandon this island, our parents will not be unhappy with us.

A truth-conditional analysis of $\text{o}\check{\text{v}}$ in (20'') would go as follows. The speaker's parents would not be unhappy if they abandoned the island *as a direct consequence* of the prospect of starving or being murdered. If the two propositions in the antecedent were both true, but one did *not* follow from the other (i.e., they (a) were be in danger of starving and dying, and (b) left the island, but they did the latter because they were bored, for instance), then $\text{o}\check{\text{v}}$ could not have been added. In that sense, $\text{o}\check{\text{v}}$ would be truth-conditional in this instance. This analysis would assume that $\text{o}\check{\text{v}}$ is consequential – i.e., that it is part of $\text{o}\check{\text{v}}$'s semantics to designate propositions as following truth-conditionally from another one. The problem is not that this would lead to a non-unitary account, but rather that examples like (20) can be subsumed under a fully unitary account. In other words, $\text{o}\check{\text{v}}$ in (20) can be analyzed along the same lines as non-consequential $\text{o}\check{\text{v}}$'s (cf. *infra* for details). Its meaning is compatible with consequential contexts (like the one in (20)), but this does not mean that $\text{o}\check{\text{v}}$ is itself consequential – the consequential reading arises from the semantics of the utterance and the speaker-intended contextual assumptions, but it is an implicature, not part of the meaning $\text{o}\check{\text{v}}$ encodes. Following Grice's Modified Occam's Razor, a unitary analysis of this kind is to be preferred above an account which would, at the very least, distinguish between a truth-conditionally consequential $\text{o}\check{\text{v}}$ and a non-truth-conditional, non-consequential $\text{o}\check{\text{v}}$ (I know of no analysis of $\text{o}\check{\text{v}}$ which would even come close to the latter analysis). However, as I pointed out for $\gamma\acute{\alpha}\rho$ in §4.2.1, relevance theory does not take non-truth-conditionality to be an integral part of the semantics of DMs (see (24c) in §1.1.3.2). In that sense, the existence of truth-conditional $\text{o}\check{\text{v}}$'s would be more problematic on a coherence-based account than it would be on a relevance-theoretic one.

already been mentioned, and can as such be reanalyzed in terms of mutual manifestness; ‘progressive’ οὖν utterances start off from assumptions which are also mutually manifest; and ‘inferential’ οὖν utterances rely on assumptions made mutually manifest, as well as implicit assumptions which the speaker assumes to be manifest to the hearer.

It is important to underline here that it is ultimately up to the speaker to designate her utterance as being mutually manifest – as it is with δέ to indicate continuity-within-discontinuity, or with γάρ to signal that the assumption will function as a contextual anchor. In other words, an utterance might not be mutually manifest at all to the hearer – but the speaker can still *present* it as such. This opens the door for manipulative use of οὖν, which I will discuss towards the end of this chapter – οὖν can be used to facilitate so-called ‘shallow processing’, which is aimed at getting the audience to believe or do something by, among other things, presenting assumptions as being mutually manifest.

5.2.3.1 Resumptive, progressive, inferential... mutually manifest?

In this section, I attempt to demonstrate that all three uses proposed for οὖν in the secondary literature can be folded into one – that is, indicating the mutual manifestness of the upcoming assumption.

The resumptive use

First, let’s take a closer look at an example of ‘resumptive’ οὖν:

(24) [...] οὕτω διὰ τῆς τοῦ ἀέρος τυπώσεως, κατὰ τὴν ἑναρθρον τῆς φωνῆς κίνησιν, ἐν τῷ κρυπτῷ νόημα σαφηνίζει; Καὶ πῶς οὐ μυθῶδες τῆς τοιαύτης περιόδου λέγειν τὸν Θεὸν χρῆζειν πρὸς τὴν τῶν νοηθέντων δῆλωσιν; Ἡ εὐσεβέστερον λέγειν, ὅτι τὸ θεῖον βούλημα καὶ ἡ πρώτη ὁρμὴ τοῦ νοεροῦ κινήματος, τοῦτο Λόγος ἐστὶ τοῦ Θεοῦ; Σχηματίζει δὲ αὐτὸν διεξοδικῶς ἡ Γραφή, ἵνα δείξῃ ὅτι οὐχὶ γενέσθαι μόνον ἐβουλήθη τὴν κτίσιν, ἀλλὰ καὶ διὰ τινος συνεργοῦ παραχθῆναι ταύτην εἰς γέννησιν. [...] τὸν Θεὸν προστάττοντα καὶ διαλεγόμενον εἰσάγουσα, τὸν ᾧ προστάσσει καὶ ᾧ διαλέγεται κατὰ τὸ σιωπώμενον ὑποφαίνει, οὐ βασκαίνουσα ἡμῖν τῆς γνώσεως, ἀλλ’ ἐκκαίουσα ἡμᾶς πρὸς τὸν πόθον, δι’ ὧν ἴχνη τινὰ καὶ ἐμφάσεις ὑποβάλλει τοῦ ἀπορρήτου. [...] Φωνὴ μὲν γὰρ δι’ ἀκοὴν, καὶ ἀκοὴ φωνῆς ἔνεκεν. Ὅπου δὲ οὐκ ἀήρ, οὐχὶ γλῶσσα, οὐχὶ οὖς, οὐ πόρος σκολιδὸς ἐπὶ τὴν ἐν τῇ κεφαλῇ συναίσθησιν ἀναφέρων τοὺς ψόφους, ἐκεῖ οὐδὲ ῥημάτων χρεῖα, ἀλλ’ ἐξ αὐτῶν, ὡς ἂν εἴποι τις, τῶν ἐν καρδίᾳ νοημάτων τοῦ θελήματος ἢ μετάδοσις. Ὅπερ οὖν ἔφην, ὥστε διαναστῆναι τὸν νοῦν ἡμῶν πρὸς τὴν ἔρευναν τοῦ προσώπου πρὸς ὃν οἱ λόγοι, σοφῶς καὶ ἐντέχνως τὸ σχῆμα τοῦτο τῆς διαλέκτου παρείληπται. (Bas. Hex. III.2.14-45)

[Basil is asking in what manner God speaks:] “[...] Is He obliged to strike the air by the articulate movements of the voice, to unveil the thought hidden in His heart? And how

does it not seem like an idle fable to say that God should need such a circuitous method to manifest His thoughts? Or is it more pious to say, that the divine will and the first impetus of divine intelligence – that these are the Word of God? It is He whom Scripture vaguely represents, to show us that God has not only wished to create the world, but also to create it with the help of a co-operator. [...] by making God command and speak, Scripture tacitly shows us Him Whom He orders and Whom he talks to – not because it grudges us the knowledge of the truth, but **because it tries to kindle our desire by showing us some trace and indication of the mystery.** [...] Voice was made for hearing, and hearing for voice. Where there is neither air, nor tongue, nor ear, nor that winding canal which carries sounds to the seat of sensation in the head, there is no need for words, but thoughts of the soul are sufficient to transmit the will. As I said [*oun*], to set our minds seeking the Person to whom the words are addressed, this form of expression is wisely and ingeniously taken up.”

The wall of text here provides necessary context, and also illustrates the resumptive value of the οὖν utterance. Basil starts by arguing that God doesn’t speak as we do, but that ‘the Word of God’ amounts to ‘divine will and the first impetus of divine intelligence’ (τὸ θεῖον βούλημα καὶ ἡ πρώτη ὁρμή τοῦ νοεροῦ κινήματος). He goes on to state that Scripture describes God as ‘speaking’ so as to ‘kindle our desire by showing us some trace and indication of the mystery’ (ἀλλ’ ἐκκαίουσα ἡμᾶς πρὸς τὸν πόθον, δι’ ὧν ἴχνη τινὰ καὶ ἐμφάσεις ὑποβάλλει τοῦ ἀπορρήτου; in bold). He then proceeds with some further remarks on the needlessness and physical impossibility of ‘speaking’ being taken literally (abridged here), before turning to a repetition of what he had said previously – he marks this latter transition with οὖν, and also with ὅπερ ἔφην (‘as I said’), which provides additional evidence for a ‘resumptive’ interpretation here. In the οὖν utterance, Basil argues that Scripture presents God as ‘speaking’ as ‘a wise and ingenious contrivance to set our minds seeking the Person to whom the words are addressed’ – a recap of what he stated previously, i.e., that Scripture acts as if God is speaking so as to whet our appetite for contemplating the higher mysteries of God by offering us a glimpse of what really happened at creation. In that sense, the οὖν utterance here is a clear example of a resumptive context.

In relevance-theoretic terms, this kind of ‘resumptiveness’ can be reimagined as a form of mutual manifestness (cf. Hansen 1997). Sperber & Wilson (1995²: 39) define manifestness as follows:

“A fact is manifest to an individual at a given time if and only if he is capable at that time of representing it mentally and accepting its representation as true or probably true.”

The set of assumptions which are manifest to an individual at a given time are known as that individual’s ‘cognitive environment’. Mutual manifestness enters into the

equation at the intersection of two individuals' cognitive environment, which Sperber & Wilson (1995²: 41) term the 'mutual cognitive environment'. As they underline, one of the assumptions contained within this mutual cognitive environment is that the two individuals "share this environment" (ibid.). Put differently, "[i]n a mutual cognitive environment, for every manifest assumption, the fact that it is manifest to the people who share this environment is itself manifest" (id.: 41-42). For example, if I and my girlfriend come across a friend of mine and I start talking to him, it will be manifest to both her and to me (and to the person I'm talking to) that I am talking to this person. In addition, all three of us are aware that all three of us are aware of the fact that I am talking to this person – this assumption is mutually manifest; that is, it is part of our mutual cognitive environment.

Sperber & Wilson (1995²: 44) point out that successful communication leads to an expansion of the mutual cognitive environment. If I tell you that I'm going to see a movie tonight, the assumption that I'm going to see a movie tonight will be added to your cognitive environment. The assumption that both of us are aware that we are both aware of this assumption is added to our mutual cognitive environment as well, which may give rise to further assumptions (for example, you won't be worried if I'm back home later than I normally would be, and I won't feel the need to inform you of the fact that I will be home later than I normally would be). The assumption that I'm going to see a movie tonight has now become mutually manifest. Note that successful communication also *depends* on a mutual cognitive environment – I have to assume, quite trivially, that you know that I'm going to watch a movie *at the cinema* (and not at home), for instance. As such, I assume that this assumption is mutually manifest (id.: 43-44).

Returning to the example in (24), it is clear that Basil assumes that the assumption communicated in the οὖν utterance is mutually manifest. Ὅπερ ἔφη (‘like I said’) signals this explicitly – Basil indicates that he had already communicated the upcoming utterance before, i.e., that the upcoming assumption should be part of his and his audience's mutual cognitive environment as a mutually manifest assumption. As such, ὅπερ ἔφη and, I would argue, οὖν as well, point to Basil's belief that the assumption to come is mutually manifest, and that his audience will not need to go through an entirely new interpretation process – they should relate the upcoming assumption to their short-term mutual cognitive environment, which (according to Basil, at least) already contains the upcoming assumption.

The addition of ὅπερ ἔφη might have contaminated my analysis of οὖν's semantics, of course (cf. Schourup 1999: 250) – οὖν's meaning may lie in an entirely different direction. However, there can be no doubt that οὖν utterances which would traditionally be labeled 'resumptive' would be considered mutually manifest on a relevance-theoretic account. Simply put, an assumption which is taken up again

(‘resumed’) has already been mentioned in some shape or form, and can, as such, be assumed to be mutually manifest. I’ll give one other example:

(25) Ἐπιδειξάτωσαν ἔτι καὶ νῦν τὰς ἐσθήτας, οἱ τοῦ θαύματος ἐκείνου θεαταὶ καὶ μύσται, τὰς τότε κατασημανθείσας τοῖς τοῦ σταυροῦ στίγμασιν. Ὅμοῦ τε γὰρ ταῦτα διηγεῖτό τις, εἴτ’ οὖν τῶν ἡμετέρων, εἴτ’ οὖν τῶν ἑξωθεν, ἢ διηγουμένων ἤκουε, καὶ τὸ θαῦμα ἑώρα παρ’ ἑαυτῷ, ἢ τῷ πλησίον γινόμενον, κατάστερος ὢν, ἢ ἐκεῖνον ὁρῶν τοιοῦτον ἐν τοῖς ἐσθήμασι, πάσης ἰστουργικῆς ψηφίδος ἢ περιέργου ζωγραφίας ποικιλώτερον. Ἐκ τούτου τί γίνεται; Τοσαύτη τῶν ὁρωμένων κατάπληξις, ὡς μικροῦ μὲν ἅπαντας ὥσπερ ἐξ ἑνὸς συνθήματος καὶ μιᾶς φωνῆς τὸν τῶν Χριστιανῶν ἀνακαλεῖσθαι Θεὸν, εὐφημίαις τε πολλαῖς καὶ ἱκεσίαις αὐτὸν ἐξιλάσκεσθαι· πολλοὺς δὲ οὐκ εἰς ἀναβολὰς, ἀλλὰ παρ’ αὐτὰ τῶν συμβάντων προσδραμόντας τοῖς ἱερεῦσιν ἡμῶν, καὶ πολλὰ καταδεθέντας τῆς τε Ἐκκλησίας γενέσθαι μέρος, καὶ μνηθῆναι τὰ τελεώτερα, τῷ ἱερῷ καθαγνισθέντας βαπτίσματι, καὶ διὰ τὸν φόβον ὠφεληθέντας. Εἶχε μὲν οὖν²⁹ οὕτω ταῦτα· ὁ δὲ, ταῖς κατὰ μικρὸν μανίαις οἰστρηλατούμενος καὶ δονούμενος, ἐπὶ αὐτὸ τὸ κεφάλαιον ἀπαντᾷ τῶν ἑαυτοῦ συμφορῶν. (Greg. *Iul.* II.672.18-41)

[Same context as (10):] “Let those who were spectators and partakers of that prodigy exhibit their garments still now, which are stamped with the brandmarks of the Cross! For at the very moment that anyone, either of our own brethren or of the outsiders, was telling the event or hearing it told by others, he beheld the miracle happening as well in his own case or to his neighbour, being all spotted with stars, or beholding the other so marked upon his clothes in a manner more variegated than could be done by any artificial work of the loom or elaborate painting. What is the result of this? Such great consternation at the spectacle that nearly all, as by one signal and with one voice, invoked the God of the Christians, and propitiated Him with many praises and supplications: whilst many, without further delay, but at the moment of the occurrence itself, ran up to our priests, and besought them earnestly that they might be made members of the Church; be initiated in the more powerful prayers; be sanctified by the holy baptism; and be saved by means of their fright. [*Oun*] so passed that affair. He, infatuated and urged on as he was by his furies little by little, advances to meet the finishing stroke itself of his crimes.”

The οὖν utterance marks the conclusion of Gregory’s discussion about the brandmarks. In this sense, it provides no new information of its own, but just refers

²⁹ For more on the μὲν οὖν combination, see footnote 81 *infra*.

back to the preceding utterances – note the use of anaphoric οὕτω (‘so’) and ταῦτα (‘these things’), which both refer back to what was said previously. The οὖν utterance, then, is fully ‘resumptive’ in the sense that it only refers back to assumptions which are mutually manifest.

The progressive use

The question now becomes whether οὖν marks the communicated assumption’s mutual manifestness in this sense – or something else. To answer it, we’ll need to investigate the other contexts in which οὖν occurs, starting with the progressive one. As we will see, ‘progressive’ οὖν is really just another way of referring to ‘resumptive’ (i.e., mutually manifest) οὖν – in proposing the former, the analyst’s focus has just shifted to that part of the utterance which is not mutually manifest, and which does not fall under οὖν’s scope. As in (11)–(13), the assumption which is referred back to in the οὖν utterance (and which hence points to the ‘resumptiveness’ of the (‘progressive’) οὖν utterances) is in boldface where there is a large gap between the assumption referred to and the οὖν utterance.

(26) Πρῶτον μὲν, διὰ τί **ὁ κατὰ φύσιν ὑπάρχει τῷ ὕδατι φέρεσθαι πρὸς τὸ κάταντες**, τοῦτο ἐπὶ τὸ πρόσταγμα τοῦ δημιουργοῦ ὁ λόγος ἀνάγει; Ἔως μὲν γὰρ³⁰ ἂν ἐπὶ τοῦ ἰσοπέδου κείμενον τύχη τὸ ὕδωρ, στάσιμόν ἐστιν, οὐκ ἔχων ὅπου μεταρρυῇ· ἐπειδὴν δέ τινος πρανοῦς λάβηται, εὐθὺς ὀρμήσαντος τοῦ προάγοντος, τὸ συνεχὲς αὐτῷ τὴν βάσιν τοῦ κινηθέντος ἐπιλαμβάνει, καὶ τὴν ἐκείνου τὸ ἐφεπόμενον· καὶ οὕτως ὑπεκφεύγει μὲν αἰὲν τὸ προάγον, ἐπωθεῖ δὲ τὸ ἐπερχόμενον· καὶ τοσοῦτῳ ὀξυτέρα ἢ φορὰ γίνεται, ὥσπερ ἂν καὶ τὸ βάρος ἢ πλεῖον τοῦ καταφερομένου, καὶ τὸ χωρίον κοιλότερον, πρὸς ὃ ἡ ἐπίρρυσις. Εἰ **οὖν** οὕτω πέφυκε τὸ ὕδωρ, παρέλκοι ἂν τὸ πρόσταγμα τὸ κελεῖον συναχθῆναι εἰς συναγωγὴν μίαν. (Bas. Hex. IV.2.17-29)

[Basil is discussing some problems associated with God’s command to ‘let the waters be gathered unto one place’:] “And first, how is it that **what happens as a law of nature – that water flows downwards** – , that Scripture refers this to the fiat of the Creator? As long as water is spread over a level surface, it does not flow; it is immovable. But when it finds any slope, immediately the foremost portion falls, then the one that follows takes its place, and that one is itself replaced by the one which follows. Thus incessantly the front part flows, and presses the one which follows, and the rapidity of their course is in proportion both to the mass of water that is being carried, and the hollowness of the

³⁰ This γὰρ utterance can be considered an implicit premise for the preceding assumption – it is quite comparable to the γὰρ utterance in (31) in chapter 4.

place, to which it flows. If [oun] such is the nature of water, it was supererogatory to command it to gather into one place.”

Here, anaphoric οὕτω (‘so’) points back to the preceding assumptions – ‘if water flows οὕτω by nature (πέφυκε)’, that is, as Basil has been discussing³¹, then it was superfluous for God to command it to be gathered unto one place. In that sense, the οὖν utterance presents a new step in Basil’s argumentation, but the protasis of the material implication he makes here is mutually manifest.

(27) Ὁ μὲν γε παραπέμπεται πανδήμοις εὐφημίαις τε καὶ πομπαῖς, καὶ τούτοις δὴ τοῖς ἡμετέροις σεμνοῖς, ὥδαῖς παννύχοις καὶ δαδουχίαις, αἷς Χριστιανοὶ τιμᾶν μετάστασιν εὐσεβῇ νομίζομεν• καὶ γίνεται πανήγυρις μετὰ πάθους ἢ ἐκκομιδῇ τοῦ σώματος. Εἰ δέ τῳ πιστὸς ὁ λόγος, καὶ τοῦτο διεδόθη ταῖς τῶν πολλῶν ἀκοαῖς, ὅτι, ἐπειδὴ τὸν Ταῦρον υπερβάλλοι τὸ σῶμα πρὸς τὴν πατρώαν αὐτῷ πόλιν διασωζόμενον, ταύτην δὴ τὴν ὁμώνυμον ἐκείνοις καὶ μεγαλόνυμον, φωνή τις ἐκ τῶν ἄκρων ἔστιν οἷς ἐξηκούετο, οἷον ψαλλόντων τε καὶ παραπεμπόντων, ἀγγελικῶν οἶμαι δυνάμεων, γέρας τῆς εὐσεβείας ἐκείνῳ, καὶ ἀντίδοσις ἐπιτάφιος. Καὶ γὰρ³² εἰ τὴν ὀρθὴν δόξαν παρακινεῖν ἔδοξεν, ἀλλὰ καὶ τοῦτο τῆς τῶν ὑποδυναστευόντων σκαιότητος καὶ κακοδοξίας τὸ ἔγκλημα, οἱ, ἀπλῆν καὶ ἀπαγῇ εἰς εὐσέβειαν παραλαβόντες ψυχὴν, οὐ προορωμένην τὰ βάραθρα, ἀπήγαγον ἥπερ ἐβούλοντο, καὶ προσχήματι ἀκριβείας τὸν ζῆλον κακίαν εἰργάσαντο. Ἄλλ’ οὖν ἡμεῖς [...] τὸν τε πατέρα ἐννοοῦντες τὸν βαλλόμενον τὴν κρηπίδα τῆς βασιλικῆς τῷ Χριστιανισμῷ δυναστείας καὶ πίστεως, καὶ τὸν εἰς αὐτὸν κατελθόντα κληρὸν τοῦ δόγματος, ἐγεραίρομεν τὰ εἰκότα τὸ σκῆνος τοῦ δικαίᾳ βασιλείᾳ συζήσαντος, καὶ τὸν βίον καταλύσαντος τῷ ὁσίῳ τέλει, καὶ τὸ κράτος ἡμῖν καταλείψαντος. (Greg. Iul. II.684.24-II.685.16)

[Gregory is comparing the funeral processions accompanying Constantius II’s corpse (Julian’s predecessor) with that accompanying Julian’s corpse. He starts off with the former:] **“The one is followed to the tomb with public benedictions and processions, and, in fact, with all our solemnities, nocturnal chants, and torchlight followings, wherewith we Christians mean to do honour to a pious departure from this world. The assembly meets, the carrying forth of the corpse takes place amidst the weeping of all;**

³¹ Note, in this respect, the lexical anaphor from πέφυκε to κατὰ φύσιν, at the beginning of (26).

³² Compare this γάρ utterance to the one in (12) – in both cases, Gregory uses a γάρ utterance to defend Constantius against charges of impiety. In this instance, he uses the γάρ utterance to block the assumption that his previous story (about how the ‘angelic powers’ accompanied Constantius’ corpse) cannot be true, as Constantius wasn’t all that pious during his time on Earth. In the γάρ utterance, he lays the charge of impiety at the feet of Constantius’ underlings, and implies that he was actually genuinely pious. Armed with this assumption, the preceding one makes a lot more sense.

and, if one can believe the story, which is spread about by the reports of many, when the corpse was passing over Mount Taurus, on its way to his native city (that city of the same name with those princes and of illustrious name) a sound from the heights was heard by some of the train, as though of persons playing on musical instruments and accompanying them – these being, I suppose, the angelic powers, in honor to his piety and a funereal recompense. For although he had seemed to shake the foundations of the true faith, this charge must be laid, nevertheless, on his subordinates' stupidity and unsoundness, who, getting hold of a soul that was unsuspecting and not firm in its piety, nor able to see the pitfalls in its path, led it astray where they pleased, and under the pretence of correctness of doctrine, converted his zeal into sin. But [οὖν] we [...], out of regard for his father (who had laid the foundation of the imperial power and faith with a Christian flavor) as well as for the inheritance of the Faith that had come to him by descent – we revered with good reason the earthly Tabernacle of him that had spent his life in reigning righteously, that had finished his course with a holy end, and had left the supremacy to our side.”

The οὖν utterance here begins a new step in Gregory's narrative – but it is 'resumptive' (mutually manifest) in that it refers back to the assumptions in boldface. These assumptions and the οὖν utterance are separated by a digression on the putative angelic procession accompanying Constantius' corpse and some excuses for his seemingly un-Christian behavior. With the οὖν utterance, Gregory drags his narrative back on track, emphasizing the Christians' respect for Constantius.

(28) Καὶ ταῦτα εἰπὼν τὴν τε αὐτοῦ καὶ τὴν Περσίννης μίτρην, τὸ σύμβολον τῆς ἱερωσύνης, ἀφελὼν, τὴν μὲν τῷ Θεαγένει, τὴν αὐτοῦ, Χαρικλείᾳ δὲ τὴν Περσίννης ἐπιτίθησιν· οὗ γεγονότος ἐνθύμιον τοῦ χρησμοῦ τοῦ ἐν Δελφοῖς ὁ Χαρικλῆς ἐλάμβανε καὶ τοῖς ἔργοις βεβαιούμενον τὸ πάλαι παρὰ τῶν θεῶν προαγορευθὲν ἠΐρισκεν, ὃ τοὺς νέους ἔφραζεν ἐκ τῶν Δελφῶν διαδράντας

ἴξεσθ' ἡελίου πρὸς χθόνα κυανέην,
 Τῇ περ ἀριστοβίων μέγ' ἀέθλιον ἐξάψονται
 Λευκὸν ἐπὶ κροτάφων στέμμα μελαινομένων.

Στεφθέντες οὖν οἱ νέοι λευκαῖς ταῖς μίτραις, τὴν τε ἱερωσύνην [ἅμα τῷ Ὑδάσπῃ] ἀναδησάμενοι καὶ τὴν θυσίαν αὐτοὶ καλλιερήσαντες, [...]. (Hel. Aeth. 10.41.2.1-10.41.3.3)

[This is the last paragraph of the Aethiopica. Hydaspes has accepted Chariclea as his daughter, and the marriage between her and Theagenes. He now invests them as priests for the Moon and Sun, respectively.] “With these words **he removed his mitre and that of Persinna, the insignia of their priesthood, and set his upon Theagenes' head and Persinna's upon that of Chariclea.** As soon as this was done Charicles called to mind the

oracle at Delphi, and recognized that the divine prediction of long ago was being fulfilled in actual fact. For it had stated that the young pair, after fleeing from Delphi, 'shall arrive at the swarthy land of the Sun.

There they shall win and wear about their temples, as the noble prize of virtuous lives,

A white coronal from darkling brows.'

Crowned [*oun*] with the white mitres, the youths were invested with all the priestly insignia [along with Hydaspes], and themselves performed a propitious sacrifice, [...]."

This example is very similar to (27).³³ Heliodorus has already mentioned that Theagenes and Chariclea are being crowned – after a short excursus in which he represents Charicles' thoughts (he connects the scene which is unfolding to the oracle which was given way back in book 2.35, the implicature being that things have come full circle), he continues on to the next part of the priestly investiture. He does so by referring back to Theagenes and Chariclea being crowned, and, hence, by presenting a mutually manifest assumption. The mutual manifestness is quite obvious here – *μίτρων* in the bolded part is taken up again in the *οὖν* utterance with *ταῖς μίτραις*; the same is true for *τῆς ἱερωσύνης* in the bolded part and *τὴν ἱερωσύνην* in the *οὖν* utterance.³⁴

What do these examples have in common with the 'resumptive' examples in e.g. (11), (12) or (24)? It is not the 'progressive' part of the utterance – this becomes particularly clear in (12), where *οὖν* cannot reasonably be considered to introduce a 'new step'. What unites the resumptive utterances with the progressive utterances in (26)–(28) is the fact that they refer back to mutually manifest assumptions. The same is true for e.g. (14), where the *οὖν* utterance looks back to the verse from Genesis which Basil quoted at the beginning of the example. (16) is more complicated – at the start of the excerpt, the narrator notes that the sun was sending its rays *ἀπὸ τῶν δυσμικωτέρων* ('from the occidental quarter'); when the *οὖν* utterance comes around, afternoon has advanced pretty far (*δείλης ὀψίας ἤδη*) – as such, there is a temporal transition, but we are still in the same overall time slot as we were before, where the sun was already in the west and afternoon had arrived. There is no way to know whether Heliodorus in fact wanted to mark a larger temporal gap (with *ἀπὸ τῶν δυσμικωτέρων* referring to the beginning of the afternoon and *δείλης ὀψίας ἤδη* to its end), but given the mutual manifestness of the other examples under consideration here, it would seem more likely that the

³³ See also e.g. *Hel. Aeth.* 5.8.3.1.

³⁴ Note also the lexical and phonetic echo between *στέμμα* ('coronal') at the end of the oracle and *στεφθέντες* at the beginning of the *οὖν* utterance – another way in which the *οὖν* utterance refers back to mutually manifest information.

temporal reference in the οὖν utterance would evoke the time slot of the beginning of the excerpt in (16).

The inferential use

Based on these instances, then, it would seem difficult to paint οὖν's main function in 'progressive' terms, as we have now encountered οὖν utterances which are resumptive but not progressive (but not *vice versa*). Instead, the mutual manifestness hypothesis would seem to hold water. I now turn to 'inferential' οὖν to see whether these examples can shed any further light on this hypothesis – either providing support or casting doubt on οὖν as a marker of mutual manifestness.

(29) Ἐντεῦθεν δὲ ἤδη, ὥσπερ ψάμμου ποδῶν ὑποσπασθείσης, ἢ νηὶ ζάλης ἀντιπесоῦσης, εἰς τοῦπίσω χωρεῖ τὰ πράγματα. Ἡ γὰρ³⁵ Κτησιφῶν φρούριόν ἐστι καρτερόν καὶ δυσάλωτον, τείχει τε ὀπτῆς πλίνθου, καὶ τάφρῳ βαθείᾳ, καὶ τοῖς ἐκ τοῦ ποταμοῦ τενάγασιν ὠχυρωμένη. Ποιεῖ δὲ αὐτὴν ὀχυροτέραν καὶ φρούριον ἕτερον, ᾧ προσηγορία Κωχή, μετὰ τῆς ἴσης ἀσφαλείας συγκείμενον, ὅση τε φυσικὴ καὶ ὅση χειροποίητος, τοσοῦτον ἐνούμενον, ὥς μίαν πόλιν δοκεῖν ἀμφοτέρας, τῷ ποταμῷ μέσῳ διειρημένους ταύτας. [...] Τοῦ Εὐφράτου ποταμῶν ὄντος μεγίστου μέρος οὐκ ἐλάχιστον ἀπορρήξας, καὶ περιγαγὼν, ὅσον ναυσὶν εἶναι πλοῖμον ἐκ διώρυγος (ἥς καὶ ἀρχαῖά φασιν ἔχνη φαίνεσθαι), καὶ ταύτῃ τῷ Τίγριδι συμβαλὼν μικρὸν ἔμπροσθεν, οὕτω διασώζει τὰς ναῦς ἐκ τοῦ ποταμοῦ τῷ ποταμῷ δοθείσας ἐν ἀσφαλείᾳ. Ὡδε μὲν οὖν τὸν ἐκ τῶν φρουρίων τούτων διαδιδράσκει κίνδυνον. (Greg. *Iul.* II.676.24-II.677.1)

[Gregory is discussing Julian's excursion into Persia.] "From this point, however, like sand slipping from beneath the feet, or a great wave bursting upon a ship, things began to go back with him; for Ctesiphon is a strong fortified town, hard to take, and very well secured by a wall of burnt brick, a deep ditch, and the swamps coming from the river. It is rendered yet more secure by another strong place as well, the name of which is Coche, furnished with equal defences as far as regards both its natural location and its artificial protection – so closely united with it that they appear one city, the river separating both, between them. [...] Of the river Euphrates, which is a very large one, he cuts off no inconsiderable part and diverts it so as to be navigable for vessels, by means of a canal, of which ancient vestiges are said to be visible; and by joining the Tigris a little in front of Ctesiphon, he thus saves his boats from one river by means of the other

³⁵ This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – if Ctesiphon is heavily fortified, hard to take and well-secured, it is easier to understand why Gregory thinks it was at this point that things began to go south with Julian's campaign against the Persians.

river, in all security; in this way [oun] he escapes the danger that menaced him from the two garrisons.”

The oũv utterance is obviously inferential. Ctesiphon and Coche are strongly fortified (premise 1); Julian diverts the Euphrates so as to avoid Ctesiphon (premise 2); and so (oũv) he escapes the garrisons at Ctesiphon and Coche. Note anaphoric ὥδε (‘like this’), which points backwards and, as such, to the resumptiveness inherent in the inference.

Can inferences be subsumed under the mutual manifestness hypothesis? Hansen (1997) seems to think so – she argues that French *donc*, which often marks syllogistic inferences, is a marker of mutual manifestness. These types of conclusions are mutually manifest in that they are “by definition [...] contained in the premises, and hence can convey no new information” – the assumption preceding the *donc* utterance “is seen as automatically making” the assumption in the *donc* utterance “available” (1997: 170).³⁶

This is certainly relevant for (29). The assumption marked by oũv falls out naturally (inferentially) from the preceding assumptions – if Ctesiphon and Coche lie by the Euphrates; if they are strongly fortified; and if Julian diverts the river by which Ctesiphon and Coche lie; then it will be logical to assume that the aim (and, assuming

³⁶ As a side note, there are very obvious parallels between French *donc* and oũv. According to Hansen, *donc* occurs in two contexts – “one in which it marks a conclusion or a result [...] and one in which it marks a repetition of something said earlier” (1997: 165; cf. also Pellet (2009: 168) and Ferré (2011: 671)). This correlates, of course, with the ‘resumptive’ and ‘inferential’ uses proposed for oũv.

There are also clear parallels with English *so*. Consider the following example, from the 2012 video game *Mass Effect 3*:

“First Contact War? Yeah, I was there. My first real combat. First for a lot of us. I remember one night, early in the war, strapped to my seat as our transport approached the LZ [landing zone, SZ]. Everyone was dead silent. Just the sound of breathing. Good men. I'd trained with all of them. We were always joking and horsing around. But not this time. Just the rattle of the shuttle and that heavy breathing. Everyone was thinking the same thing: we're off to fight alien invaders. Aliens! Think about that. We all grew up wondering what was out there, if we were alone in the universe. Now we knew. We weren't alone. And we were in trouble.

So there we were, about to face an enemy as different and unknown as we could imagine. I knew I had to say something, keep the men relaxed. So I turned to the soldier beside me, Hendricks I think, and asked him how his mother was doing. [...]”

The first ‘so’ refers back to a mutually manifest assumption – ‘there’ is the seat in the transport which was mentioned at the beginning of this excerpt. The second ‘so’ is inferential – the speaker’s decision to turn to the soldier beside him, and his asking how his mother is doing, is presented as following inferentially from the assumption that the speaker had to ‘keep the men relaxed’.

Finally, oũv’s ‘resumptive’ and ‘inferential’ functions can be expressed by *dus* in Dutch (Evers-Vermeul 2005: 117-118). As such, the ‘resumptive’ and ‘inferential’ uses commonly associated with oũv are cross-linguistically expressed by single DMs as well.

that his plan worked, the outcome) of his diversion would be to escape the strongly fortified garrisons at Ctesiphon and Coche. In that sense, the assumption marked by οὖν is mutually manifest from the assumptions which had been made mutually manifest in the previous utterances (on this point, see also Bakker 2009: 59).

(30) Καὶ ὁ μὲν ἐσιώπησεν ἐπιθρηνῶν γοῶδες τοῖς εἰρημένοις. Ὁ δὲ Ὑδάσπης πρὸς τὸν Θεαγένην «Τί» ἔφη «πρὸς ταῦτα ἐρεῖς;» Ὁ δὲ «Ἀληθῆ» ἔφη «πάντα τὰ κατηγορηθέντα. Ληστής ἐγὼ καὶ ἄρπαξ καὶ βίαιος καὶ ἄδικος περὶ τοῦτον, ἀλλ' ὑμέτερος εὐεργέτης.» «Ἀπόδος οὖν» ἔφη «τὴν ἀλλοτρίαν» ὁ Ὑδάσπης, [...]. (Hel. Aeth. 10.37.1.1-10.37.2.2)

[Charicles is accusing Theagenes of abducting his daughter, Chariclea.] “He said no more, only adding to his words a mournful lamentation. Hydaspes then asked Theagenes: ‘What can you answer to that?’ He replied: ‘His accusations are all true. I have offended against him by robbery, rapine, violence and injustice; but to you I am a benefactor.’ ‘Give back [oun],’ said Hydaspes, ‘her who belongs to another, [...]’.”

The inference here follows from Theagenes’ answers to Hydaspes’ question. If Theagenes did indeed abduct Chariclea from Charicles (as he admits in (30)), then (οὖν) he will have to give her back, as she belongs to someone else (τὴν ἀλλοτρίαν). Once Hydaspes has confirmed the premise, the conclusion falls out immediately following a standard *modus ponens* inference based on other mutually manifest, implicit assumptions (such as ‘you shouldn’t abduct children’ and ‘if you abduct a child, you should give it back to its parents’) – and it is marked by οὖν. As such, the assumption marked by οὖν would be mutually manifest once the preceding assumption (‘Theagenes has abducted Chariclea’) has become mutually manifest.

(31) Ὁ καρκῖνος τῆς σαρκὸς ἐπιθυμεῖ τοῦ ὀστρέου· ἀλλὰ δυσάλωτος ἢ ἄγρα αὐτῷ διὰ τὴν περιβολὴν τοῦ ὀστράκου γίνεται. Ἀρραγεῖ γὰρ³⁷ ἐρκίω τὸ ἀπαλὸν τῆς σαρκὸς ἢ φύσις κατησφαλίσατο. Διὸ καὶ ὀστρακόδερμον προσηγόρευται. Καὶ ἐπειδὴ δύο κοιλότητες ἀκριβῶς ἀλλήλαις προσηρμοσμέναι τὸ ὄστρεον περιπτύσσονται, ἀναγκαίως ἄπρακτοί εἰσιν αἱ χηλαὶ τοῦ καρκίνου. Τί οὖν ποιεῖ; Ὅταν ἴδῃ ἐν ἀπηνέμοις χωρίοις μεθ’ ἡδονῆς διαθαλπόμενον, καὶ πρὸς τὴν ἀκτῖνα τοῦ ἡλίου τὰς πτύχας ἑαυτοῦ διαπλώσαντα, τότε δὴ λάθρα ψηφίδα παρεμβالὼν, διακωλύει τὴν σύμπτυξιν, καὶ εὐρίσκεται τὸ ἐλλεῖπον τῆς δυνάμεως διὰ τῆς ἐπινοίας περιεχόμενος. (Bas. Hex. VII.3.20-31)

³⁷ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – the γάρ utterance explains why the oyster would be a difficult prey for the crab.

“The crab loves the flesh of the oyster; but it is a difficult prey to seize for him, sheltered by its shell. For nature has secured its soft flesh with an enclosure – thus they also call the oyster *sherd-hide*. Thanks to the two shells with which it is enveloped, and which adapt themselves perfectly the one to the other, the claws of the crab are by necessity quite powerless. What [*oun*] does he do? When he sees it, in places sheltered from the wind, warming itself with pleasure, and half opening its shells to the sun, then he secretly throws in a pebble, prevents them from closing, and finds what force had left behind by outflanking him with cunning.”

The question marked by *oũv* signals the transition from the problem faced by the crab in wanting to eat an oyster, and its solution to that problem. The oyster’s hard shell and the crab’s predilection for oyster flesh are the premises, and the crab’s penchant for blocking the oyster from closing by throwing a pebble (*ψηφῖδα*) in its opening is the result of the inference. Note that this inference is not made by the crab (at least, as far as we know), but by Gregory. The rhetorical question ‘what does he *oun* do?’ introduces the crab’s plan for solving the preceding puzzle. While it could be considered to be marking a ‘new step’ in the argumentation, it may be better to regard it as an example of ‘inferential’ *oũv* – the previous assumptions function as input (‘a crab loves to eat oysters’; ‘oyster flesh is difficult to get at due to its shell’), with the answer to the *oũv* question serving as the output of the inference (‘it prevents the oyster from closing by blocking it with a pebble’). The *oũv* utterance makes the intervening step explicit and hence mediates the inference – it asks how we get from the input (the problem the crab faces) to the output (its solution). As such, Basil would mark the crab’s upcoming solution as following logically, and hence following mutually manifestly, from the preceding premises by marking the introductory rhetorical question with *oũv*. Of course, he may be wrong about this – the conclusion may not be mutually manifest at all to his audience. By marking the question with *oũv*, however, he *presents* the crab’s solution as following logically (i.e., being in accordance with) mutually manifest assumptions – if the crab wants oyster flesh, but the shell is in its way, the only solution is to block the oyster from closing its shell. Now, the precise method the crab uses (the pebble) may not be mutually manifest, but the general direction of this method (that is, preventing the oyster from closing its shell) should, according to Basil, follow logically from the preceding premises. The point here is that ‘inferential’ *oũv*, in (29)-(31), can be explained unitarily and in line with the ‘resumptive’ and ‘progressive’ examples discussed above as encoding information about the mutual manifestness of the upcoming assumption.

Let's end our discussion of 'inferential' οὖν with the εἴτ' οὖν examples which were given in (8)-(10) *supra*. These occur mostly in the *Contra Iulianum*, although there are also instances in the *Aethiopica*.³⁸ I'll repeat one of the examples here:

(9) Τὸν πόλεμον δὲ ἔλεγεν ὧδε. «Ἦγετο ξένος νεανίας τις κάλλει τε καὶ μεγέθει διαφέρων ὡς Ὀροονδάτην τὸν μεγάλου βασιλέως ὕπαρχον εἰς τὴν Μέμφιν, ἀπέσταλτο δέ, οἶμαι, παρὰ Μιτράνου τοῦ φρουράρχου ληφθεὶς αἰχμάλωτος ὡς τι τῶν μεγίστων δῶρον ὡς φασί. Τοῦτον οἱ τῆς κώμης τῆς ἡμετέρας ταυτησί» δείξασα τὴν ἐχομένην «ἐπελθόντες ἀφείλοντο, γνωρίζειν εἴτ' οὖν ἀληθεύοντες εἴτε καὶ πρόφασιν πλάσαντες. (Hel. *Aeth.* 6.13.1.1-8)

[Chariclea and Calasiris have come across the witch of Bessa; she gives an account of the battle which took place there.] "Of the fighting she gave them this account: 'A young stranger, of singular beauty and stature, was being taken to Memphis for Oroondates, the lieutenant-governor of the Great King. He had been dispatched, I believe, by Mitranes, a garrison commander, after being taken prisoner, and was offered as a gift of particular value, so they say. The people of our village here,' she went on, pointing to the place near by, 'waylaid the party and carried him off, stating that they knew him – either [*oun*] telling the truth, or even a made-up pretext.'"

This example is part of a larger pattern in which οὖν marks the beginning of a two-way option separated by εἴτε... εἴτε ('or... or'). In this case, the witch states that the villagers may or may not have known the 'young stranger' she is talking about.

Οὖν can also mark both options, as in (10):

(10) ἄῤρ δὲ οὐκ ἐπισημαίνει τοῖς τοιοῦτοις καιροῖς, οὐδὲ ἡγιάσθη τότε τοῖς σημείοις τοῦ πάθους; Ἐπιδειξάτωσαν ἔτι καὶ νῦν τὰς ἐσθῆτας, οἱ τοῦ θαύματος ἐκείνου θεαταὶ καὶ μύσται, τὰς τότε κατασημανθείσας τοῖς τοῦ σταυροῦ στίγμασιν. Ὅμοῦ τε γὰρ ταῦτα διηγείτο τις, εἴτ' οὖν τῶν ἡμετέρων, εἴτ' οὖν τῶν ἔξωθεν, ἢ διηγουμένων ἤκουε, καὶ τὸ θαῦμα ἑώρα παρ' ἑαυτῷ, ἢ τῷ πλησίον γινόμενον, κατάστερος ὢν, ἢ ἐκεῖνον ὁρῶν τοιοῦτον ἐν τοῖς ἐσθήμασι, πάσης ἱστουργικῆς ψηφίδος ἢ περιέργου ζωγραφίας ποικιλώτερον. (Greg. *Iul.* II.672.16-27)

[Julian planned to rebuild the Temple in Jeruzalem; however, Gregory contends that God signified his displeasure at this by sending an earthquake and a great fire. He also painted the air with a sign.] "And did not air give a sign on those same occasions, and

³⁸ There are instances of εἴτ' οὖν in earlier Greek – see e.g. Aeschylus, *Agamemnon* 491; Sophocles, *Electra* 199; Plato, *Etahyphro* 3d1, *Apology* 27c6, *Protagoras* 333c6; Aristotle, *Nicomachean Ethics* 1176a26. For examples like (10), where οὖν marks both options, see e.g. Aeschylus, *Choephoro* 683-684; Plato, *Apology* 34e5.

was it not hallowed then with the badges of the Passion? Let those who were spectators and partakers of that prodigy exhibit their garments still now, which are stamped with the landmarks of the Cross! For at the very moment that anyone, either [*oun*] of our own brethren or [*oun*] of the outsiders, was telling the event or hearing it told by others, he beheld the miracle happening as well in his own case or to his neighbour, being all spotted with stars, or beholding the other so marked upon his clothes in a manner more variegated than could be done by any artificial work of the loom or elaborate painting.”

Here, the distinction is between Christians (i.e., ‘our people’, τῶν ἡμετέρων) and pagans. While οὖν marks both options here, the second option in (9) is marked by focalizing καί (‘even’), which seems to suggest that the speaker thinks that it is less likely that the villagers weren’t telling the truth. This may explain why the second option in (9) is not marked by οὖν – it is less likely and therefore not mutually manifest. However, in both (9) and (10), the two options exhaust all realistic possibilities – one can either tell the truth, or make something up; and one is either part of the Christian flock or part of the pagans.³⁹ In both cases, then, the speakers make explicit what is implicitly manifest – that if someone says something, they will either be telling the truth or making something up; or that if someone says something, he/she will be either a Christian or a non-Christian. There are three other examples with εἴτ’ οὖν... εἴτε, and they are just as exhaustive as (9) is – the two options discussed are, realistically, the only two options available.⁴⁰ In that sense, the first οὖν could also be considered to apply to both options overarchingly – in examples with two οὖν’s (like (10)), the mutual manifestness of both options would be highlighted. Sample size is very limited here, of course, and no definitive conclusions can be drawn either way.

Note that (9) and (10) are cases where an assumption can be manifest without being mentally represented:

“In a weaker sense, to say that an individual knows some fact is not necessarily to imply that he has ever entertained a mental representation of it. For instance, before reading this sentence you all knew, in that weak sense, that Noam Chomsky never had breakfast with Julius Caesar, although until now the thought of it had never crossed your mind.” (Sperber & Wilson 1995²: 40)

³⁹ For other examples of this kind, see e.g. Greg. *Iul.* I.580.33–34, I.608.43, II.676.13; and Hel. *Aeth.* 10.28.4.2.

⁴⁰ In Greg. *Iul.* II.676.13, Julian is entering the territory where the Tigris and the Euphrates meet without any resistance, either (εἴτ’ οὖν) because the speed of his army’s march had left them undetected or (εἴτε) because the Persians were leading him into a trap. In Greg. *Iul.* I.608.43, Julian is presiding over a day of imperial gifts (δωρεᾶς βασιλικῆς ἡμέρα) – either (εἴτ’ οὖν) one which is always on the calendar, or (εἴτε) which he himself improvised. In Hel. *Aeth.* 10.28.4.2, finally, Theagenes decides to get a runaway bull under control, either (εἴτ’ οὖν) because he is brave or (εἴτε) because of an impulse sent by some god.

The assumption that Noam Chomsky never had breakfast with Julius Caesar is, in that sense, manifest. The same is true for (9) and (10) – the fact that the villagers either told the truth or made up something, and the fact that the people who witnessed the sign were either Christians or non-Christians, speaks for itself, and is, as such, presented as being mutually manifest. The speaker marks these utterances with οὖν to point to mutual manifestness – the witch, in (9), and Gregory, in (10), indicate that the upcoming assumption is easily inferable given the assumption that words can be true or not true, and that people can be either Christians or non-Christians. Why, then, make these assumptions explicit? In (9), the witch’s goal is to generate the implicature that the villagers may have kidnapped Theagenes in order to induce a counter-attack by Mitranes – she goes on from (9) to note that the villagers are ‘an extremely warlike race’ (μαχιμώτατον [...] γένος). In (10), Gregory implies, through the οὖν utterance, that this miracle really did happen – everyone saw it and was talking about it, not just Christians. These implicatures arise more easily by making manifest the assumptions in the εἴτε... εἴτε utterances – that is, by making explicit assumptions which are mutually manifest (and which can hence be marked by οὖν) but which may not have occurred to the speaker’s audience.

The εἴτ’ οὖν collocation also marks slightly different contexts. This type, where οὖν marks an alternative, only occurs in the *Contra Iulianum* in my corpus – (8) is one example:

(8) Οὗτος ὁ λόγος σοι τῶν Πορφυρίου ψευσμάτων καὶ ληρημάτων, οἷς ὑμεῖς ὡς θεΐαις φωναῖς ἀγάλλεσθε, ἢ τοῦ σοῦ Μισοπώγωνος, εἴτ’ οὖν Ἀντιοχικοῦ (ἀμφότερα γὰρ ἐπιγράφεις τῷ λόγῳ), οὗ τι Χριστιανοῖς ἀτιμότερον· ὃν τότε μὲν ἡ πορφυρὶς μέγαν ἐποίει, καὶ οἱ πάντα τὰ σὰ θαυμάζοντες κόλακες. (Greg. *Iul.* II.717.17-23)

[Gregory is going to discuss Julian’s essays against the Christians.] “This is the meaning of the lies and ravings of your Porphyry (of which you all boast as divinely-inspired words), and of your ‘Misopogon’, or [*oun*] ‘Antiochicus’, for you gave both names to the book – than which nothing is more contemptible in the eyes of Christians; though at the time your purple clothes [i.e., Julian’s status as emperor, SZ] made it important, and the parasites that extolled all your actions.”

In this case, the εἴτ’ οὖν utterance introduces an alternative name for the Misopogon. The alternative name is mutually manifest in the sense that it can be inferentially derived from the post-οὖν premise, marked by γάρ – if the Misopogon is the name of one of Julian’s essays, and if he gave ‘both names’ (ἀμφότερα) to the same work, then it

becomes mutually manifest that ‘Antiochicus’ is an alternative name for the Misopogon. However, not all examples are so straightforward⁴¹:

(32) Ἡμέτεροι, φησὶν, οἱ λόγοι, καὶ τὸ Ἑλληνίζειν, ὧν καὶ τὸ σέβειν θεοὺς ὑμῶν δὲ ἡ ἀλογία καὶ ἡ ἀγροικία· καὶ οὐδὲν ὑπὲρ τὸ, Πίστευσον, τῆς ὑμετέρας ἐστὶ σοφίας. Οὐκ ἂν μὲν, οἶμαι, τούτου καταγελάσαιεν οἱ παρ’ ὑμῖν τὰ Πυθαγόρου φιλοσοφοῦντες, οἷς τὸ, Αὐτὸς ἔφα, τὸ πρῶτον καὶ μέγιστόν ἐστι τῶν δογμάτων, καὶ τῶν Χρυσῶν ἐπῶν, εἴτ’ οὖν μολιβῶν αἰρετώτερον. (Greg. *Iul.* I.636.43-I.637.7)

[Gregory is representing Julian’s thought process in barring Christians from the Ancient Greek heritage.] “‘Ours,’ says he [i.e., Julian, SZ], ‘are the words and the speaking of Greek, whose right it is to worship the gods as well; yours are the want of words, and boorishness, and nothing beyond ‘Believe’, in your own doctrine.’⁴² Not, I fancy, will those laugh, who follow the sect of Pythagoras amongst you, with whom ‘He said himself’ is the first and greatest of articles of faith – even more preferable than his Golden Verses, or [αἰν] leaden words.”

In this case, the inference marked by οὖν is based on more implicit premises. Gregory here uses εἴτ’ οὖν to introduce a correction – Pythagoras’ verses are not actually golden (although they are known as such); they are, in fact, leaden. Gregory here is playing off the different value of these materials – Pythagoras’ tenets are not golden (and hence very valuable) at all, but, instead, leaden (and hence quite base). The inference is easy to make given that Gregory is talking to a congregation full of Christians. Since the Pythagorean cult was on the wrong (i.e., non-Christian) path, Pythagoras’ verses cannot be ‘golden’ – that honor is reserved for words which are true (i.e., Christian). (32) is, then, very similar to (8), except for the fact that the premise for Gregory’s ‘alternative’ in the εἴτ’ οὖν utterance in (32) is not made explicit but is assumed by Gregory to be mutually manifest.⁴³

The εἴτ’ οὖν collocation can, then, be subsumed under the mutual manifestness hypothesis. Note that it *cannot* be subsumed under the POP οὖν hypothesis, as outlined in §5.2.1 already – although a convincing case could be made that the οὖν utterance in

⁴¹ For other examples of this type, see Greg. *Iul.* I.644.44, I.645.4 and I.653.37.

⁴² It is difficult to translate the antithesis Gregory paints here. The pagans’ λόγοι are contrasted with the Christians’ putative ἀλογία (which is literally ‘the absence of any λόγοι’ and hence completely antithetical), and ‘the speaking of Greek’ (τὸ Ἑλληνίζειν) is contrasted with boorishness – ἀγροικία refers to ‘being from the countryside’.

⁴³ (32) is followed by a γάρ utterance; however, it does not provide the implicit premise for the inference marked by οὖν, as it does in (8). Instead, it provides further contextualization of ‘He said so’, further explaining how this tenet should be understood.

(32) introduces a ‘more relevant’ step, and the same could even be done for (8), the same cannot be said for e.g. (9) and (10) – both of these οὐν utterances are less central to the narrative or argumentation than the ones preceding and following them.⁴⁴

5.2.4 Comparing οὐν and δέ: additional support for the mutual manifestness hypothesis

There are other factors which point to the mutual manifestness which characterizes οὐν utterances. One of these is the fact that it co-occurs with δέ, which is what I’ll look at in this section. I’ll also analyze contexts in which δέ and οὐν *can* both occur, viz. reactions, and attempt to tease out the differences between the two more clearly than has been done up until now. On coherence approaches, the two seem to perform similar functions, as Sicking (1993: 27) has argued – both are “progressive” DMs in the sense that they mark the transition to a ‘new step’ (δέ by indicating a general ‘new step’, οὐν by marking a ‘more relevant’ step). If both can appear together, however, this view becomes less likely – οὐν would, by definition, introduce a ‘new step’, and there would be no need to add δέ as well. As such, something else must be going here. Let’s take a closer look at some examples containing both DMs – I will argue in favor of a non-compositional account under which δέ and οὐν perform the same function they do when they occur on their own.⁴⁵ As always, such an account is preferable in light of Grice’s Modified Occam’s Razor – but I also think that such an account fits the evidence better, as I will attempt to demonstrate in the next few examples.

(33) οὐκ οἶδα πότερον γραφῇ παραδῶ τὸ θρυλούμενον θαῦμα, ἢ ἀπιστήσω τοῖς λέγουσι. Καὶ γὰρ⁴⁶ αὐτὸς ταλαντεύομαι τὴν γνώμην, καὶ οὐκ ἔχω ὁποτέρωσιν νεύσω,

⁴⁴ Denniston (1954²: 418) argues that οὐν in εἴτ’ οὐν “denotes indifference”, “the implication being that the fact does not greatly matter for immediate purposes.” This may well be true, but it is once again not οὐν which would encode this information – rather, this ‘indifference’ would arise, as Denniston himself notes, as a (weak) implicature from the semantics of the utterance, along with contextual assumptions active in the audience’s consciousness. Moreover, it is interesting to observe that Denniston’s position here directly contradicts the POP οὐν hypothesis, which states that οὐν indicates that its utterance is more relevant than the preceding one (and not that the assumption(s) it marks ‘do(es) not greatly matter for immediate purposes’).

⁴⁵ For other δ’ οὐν examples which are mutually manifest in the sense that they explicitly take up another utterance again, see (10) above; also *Hel. Aeth.* 7.18.2.5 and 10.6.6.1.

⁴⁶ This γάρ utterance is reformulative – αὐτὸς ταλαντεύομαι τὴν γνώμην, καὶ οὐκ ἔχω ὁποτέρωσιν νεύσω (‘I myself am wavering in my judgment, and know not to which side to incline’) recaps the preceding utterance. The rest of the utterance adds an argument for his wavering judgment. As such, the γάρ utterance functions as

μεμιγμένων τῶν δικαίως ἂν πιστευθέντων τοῖς οὐκ ἀξίοις πίστεως· τὸ μὲν γὰρ⁴⁷ ἐπισημῆναί τι τῇ τοσαύτῃ τοῦ κακοῦ καινοτομία καὶ δυσσεβείᾳ τῶν οὐκ ἀπίστων, ἀλλὰ καὶ πολλάκις ἤδη συμβεβηκότων περὶ τὰς μεγίστας μεταβολάς· τὸ δὲ καὶ τὸν τρόπον τοῦτον σφόδρα ἐμοὶ γοῦν θαύματος ἄξιον, καὶ πᾶσι τοῖς καθαρῶς δηλοῦσθαι τὰ καθαρὰ βουλομένοις τε καὶ νομίζουσι. Τὸ δ' οὖν λεγόμενον, ὅτι θυομένῳ τὰ σπλάγχνα τὸν σταυρὸν ἀναδείκνυσι στεφανούμενον, ὃ τοῖς μὲν ἄλλοις φρίκην παρέσχε, καὶ ἀγωνίαν, καὶ τοῦ ἡμετέρου κράτους συναίσθησιν· τῷ δὲ διδασκάλῳ τῆς ἀσεβείας καὶ θάρσος δῆθεν, ὡς περιγεγραμμένων ἡμῶν καὶ συνειργμένων. (Greg. *Iul.* 576.42-577.18)

[Gregory is recalling Julian's unholy sacrifice.] "I do not know whether I ought to commit to writing the miracle that was whispered about, or to disbelieve those that report it; for I myself am wavering in my judgment, and know not to which side to incline, inasmuch as things justly believed are mixed up with others totally unworthy of credit. For that some sign from heaven should have been given to mark the novelty and impiety of the crime, is not to be reckoned among things incredible, but amongst such as have often happened before as well on the eve of very great changes; but that this sign was given in the manner reported is, to me at any rate, a matter of astonishment, as well as to all such as wish and believe that things pure are manifested in a pure manner. The story [*de oun*] is, that when he was sacrificing, the entrails of the victim displayed the figure of the Cross enclosed within a garland, which sight struck the others with horror and dismay, and the realization of our power; but the instructor in impiety it filled with confidence, as he pretended, showing that we were circumscribed and hemmed in – in this way he explained the Cross and the circle around it."

If δέ's function lies in marking some sort of discontinuity (as most analysts, including myself, argue), then οὖν's function cannot lie in marking a 'new step' – this would fly in the face of cognitive economy (i.e., processing effort without corresponding positive cognitive effects – in Gricean terms, it would break the Maxim of Quantity), *pace* Wakker (2009: 70). As such, οὖν's value must be construed differently. As in the preceding examples, a mutually manifest analysis is possible here – 'that which is said' (τὸ λεγόμενον) refers back to 'the miracle that was whispered about' (τὸ θρυλλούμενον θαῦμα). Gregory had not yet explained what this miracle was (the utterances separating τὸ θρυλλούμενον θαῦμα from the οὖν utterance were concerned with his wavering on

a contextual anchor for the preceding utterance, providing a more detailed version of the preceding utterance.

⁴⁷ This γὰρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – it fills in how the preceding τῶν δικαίως ἂν πιστευθέντων ('things which are justly believed') and τοῖς οὐκ ἀξίοις πίστεως ('things which are not worthy of belief') should be understood precisely.

whether or not he would actually explain it), but the οὖν utterance does refer back to a mutually manifest assumption – the fact that Julian was witness to a miracle during the unholy sacrifice Gregory has been discussing here. Although the precise content of the miracle, then, has not been made manifest, the οὖν utterance refers back, and should be connected to, an assumption which had been made manifest in the preceding utterance. Τὸ λεγόμενον, in particular, harks back to τοῖς λέγουσι from the beginning of the excerpt again – the idea that there is some story about a miracle which Gregory is going to tell, was already made manifest there, and it is taken up again in the οὖν utterance.⁴⁸

(34) Καὶ προσκειμένου τῇ σκέψει τοῦ Ἀχαιμένου ἐφίσταται ἀναστρέψασα ἡ Κυβέλη πάντα μὲν τὰ κατὰ τοὺς νέους ὡς ἐγεγόνει διαγγείλασα πολλὰ δὲ τῆς εὐτυχίας τὴν Ἀρσάκην μακαρίσασα, ὅφ' ἥς αὐτῇ τοσοῦτον ἐκ ταύτομάτου κατώρθωται ὁ βουλαῖς μυρίαὶ καὶ μηχαναῖς οὐκ ἂν τις ἤλπισεν, [...] μόλις τε ἐπειγομένην πρὸς τὴν θεάν τοῦ Θεαγένους ἐπισχοῦσα καὶ ὡς οὐ βούλοιο αὐτὴν ὠχρίῳσαν καὶ κυλοιδιῳσαν πρὸς τῆς ἀγρυπνίας ὀφθῆναι τῷ νεανίᾳ ἀναπαυσαμένην δὲ τὴν παροῦσαν ἡμέραν καὶ ἀναλαβοῦσαν τὸ σύνηθες κάλλος, καὶ πολλοῖς τοιοῦτοις εὐθυμον αὐτὴν καὶ τῶν κατὰ γνώμην εὐέλπιν παρασκευάσασα ἃ τε προσήκει πράττειν καὶ ὅπως προσφέρεσθαι τοῖς ξένοις παρεγγυήσασα. Ἐπεὶ δ' οὖν ἐπέστη «Τί πολυπραγμονεῖς, ὦ τέκνον;» ἔλεγεν. Ὁ δὲ «Τοὺς ἔνδον» ἔφη «ξένους οἵτινές εἰσιν ἢ πόθεν.» (Hel. Aeth. 7.15.4.1-7.16.1.3)

[Achaemenes has just seen Chariclea and Theagenes for the first time, and is curious to know who they are.] “Then, while Achaemenes was absorbed in his inspection, Cybele arrived, having returned from making a full report of her talk with the young pair. She had warmly congratulated Arsace on her good fortune, which has brought her unsolicited so great a success which could not have been hoped for from all the planning and contriving in the world [...]. She had some difficulty in restraining [Arsace’s] impulse to go at once and gaze on Theagenes: she told her she would not have her seen by the young man all pale and swollen-eyed from sleeplessness; she should rather take a rest for that day and recover her usual beauty. By plying her with many suchlike counsels Cybele at length brought her to a cheerful and hopeful view of her heart’s desire, and went on to prescribe her most suitable procedure and the demeanour that she should adopt towards her guests. When [*de oun*] Cybele had arrived at her own door, she said: ‘Why this curiosity, child?’ ‘It is about those inside,’ Achaemenes replied, ‘the strangers – to know who and whence they are.’”

⁴⁸ Note also τὸν τρόπον τοῦτον (‘the following way’), which is cataphoric, and paves the way for the οὖν utterance.

This example is another instance of the mutual manifestness inherent in οὖν utterances. At the beginning of the excerpt, the narrator had already explained how Cybele arrived at Achaemenes' (in bold type). Next, the narrative turns to Cybele's meeting with Arsace, and how she had provided her with advice on her love for Theagenes. Again, it is δέ which signals the transition here, not οὖν – the latter points to the mutual manifestness of the assumption communicated in the ἐπεὶ clause, where the narrator takes up the verb he used at the beginning of this excerpt (ἐπέστη is the aorist form of ἐφίσταται, which is a historical present). As in the previous examples, then, a mutual manifestness analysis can explain οὖν's presence without trespassing into δέ's functional domain (and without, hence, raising questions of obsolescence).

The δ' οὖν collocation can also mark inferences, as οὖν can on its own:

(35) οἱ δὲ ἐπεδίωκον, τοὺς ὅσοι Τρωγλοδύται σφῶν (ἦσαν δὲ⁴⁹ εἰς διακοσίους) προτέρους ἐπαφέντες. Τρωγλοδύται δὲ μοῖρα μὲν ἔστιν Αἰθιοπική, νομαδική τε καὶ Ἀράβων ὄμορος, δρόμου δὲ ὀξύτητα φύσει τε εὐτυχοῦντες καὶ ἐκ παίδων ἀσκοῦντες, τὴν μὲν βαρεῖαν ὄπλιν οὐδὲ ἀρχὴν ἐδιδάχθησαν ἀπὸ σφενδόνης δὲ κατὰ τὰς μάχας ἀκροβολιζόμενοι ἢ δρῶσί τι πρὸς ὃν τοὺς ἀνθισταμένους ἢ καθυπερτέρους αἰσθόμενοι διαδιδράσκουσιν· οἱ δὲ ἀπογινώσκουσιν αὐτίκα τὴν ἐπιδίωξιν ἐπερωμένους τῇ ποδωκείᾳ συνειδότες καὶ εἰς ὅπας τινὰς βραχυστόμους καὶ χηραμοὺς κρυφίους πετρῶν καταδυομένους. Οὗτοι δ' οὖν τότε πεζοὶ τοὺς ἰππέας ἔφθανον καὶ τινὰς καὶ τραυματίας γενέσθαι σφενδονῶντες ἴσχυσαν· οὐ μὴν ἐδέξαντό γε ἀντεφορμήσαντας ἀλλὰ προτροπάδην εἰς τοὺς ἀπολειφθέντας τῶν φίλων πολὺ καθυστεροῦντας ἀπεδίδρασκον. (Hel. Aeth. 8.16.3.8-8.16.5.5)

[Bagoas, while escorting Theagenes and Chariclea, falls into an Ethiopian trap.] “The Ethiopians followed in pursuit, sending on in advance all the Troglodytes in their force (to the number of two hundred). The Troglodytes are a section of the Ethiopian people leading a nomad life in lands bordering on those of the Arabs. They excel in swiftness of foot, both by their nature and by training from childhood: they have never at any stage been schooled in bearing heavy arms, but by skirmishing with slings in battle they either strike a sharp blow at their adversaries or act fast against their opponents, or, perceiving them to be in superior strength, evade them by flight. The enemy at once abandon pursuit of them, knowing their bird-like fleetness of motion and their skill in

⁴⁹ Note the δέ here – this utterance obviously contains subsidiary information, but is not marked by γάρ. It is also not a new step – it contains information which is clearly related to the preceding utterance. Instead, it indicates continuity-within-discontinuity. The δέ utterance should be interpreted against the background of the Troglodytes introduced in the previous utterance, but the assumption it communicates is also separate (i.e., discontinuous) from the story the narrator is telling – the narrative is put on hold during the δέ utterance.

creeping into narrow-mouthed holes and secret clefts in the rocks. They [*de oun*] then outdistanced on foot the horsemen, and they even succeeded in wounding some of them by using their slings; but when counter-attacked they made no stand, and instead ran back helter-skelter to their comrades whom they had left on the march a long way behind them.”

However, there is again a clear functional distribution. Once again, *δέ* marks continuity-within-discontinuity – the preceding information, which is concerned with the Troglodytes’ general approach to warfare, is moved to the cognitive background (but remains relevant) for the upcoming utterance, which gets into the Troglodytes’ approach to this battle with Bagoas and his horsemen. At the same time, *οὖν* marks the mutual manifestness of the upcoming assumption – in line with the Troglodytes’ general outlook discussed in the previous utterance, their strategy in the current skirmish can be understood as a tactic with which they are inculcated from early childhood on. As such, the (*δέ*) *οὖν* utterance is inferential – if the Troglodytes are skirmishers (*ἀκροβολιζόμενοι*), if they have no heavy arms (*τὴν μὲν βαρεῖαν ὅπλισιν οὐδὲ ἀρχὴν ἐδιδάχθησαν*), and if they are notorious for their swiftness (*δρόμου δὲ ὀξύτητα φύσει τε εὐτυχοῦντες*), then their strategy here can easily be understood: keep the horsemen at a distance and strike with their slings before retreating and leading the horsemen to the main body of their squadron.

(36) Κὰν τούτῳ τραγικόν τι καὶ γοερὸν ὁ Θεαγένης βρυχώμενος «ὦ πάθους ἀτλήτου» φησὶν «ὦ συμφορᾶς θεηλάτου. Τίς οὕτως ἀκόρεστος Ἑρινὺς τοῖς ἡμετέροις κακοῖς ἐνεβάκχευσε φυγὴν τῆς ἐνεγκούσης ἐπιβαλοῦσα, κινδύνους θαλασσῶν κινδύνους πειρατηρίων ὑποβαλοῦσα, λησταῖς παραδοῦσα, πολλάκις τῶν ὄντων ἀλλοτριώσασα; Ἐν μόνον ἀντὶ πάντων ὑπελείπετο καὶ τοῦτο ἀνὴρπασται· κεῖται Χαρίκλεια καὶ πολεμίας χειρὸς ἔργον ἢ φιλτάτη γεγένηται, δῆλον μὲν ὡς σωφροσύνης ἀντεχομένη καὶ ἐμοὶ δῆθεν ἑαυτὴν φυλάττουσα· κεῖται δ’ οὖν ὅμως ἡ δυστυχής, οὐδὲν μὲν αὐτὴ τῆς ὥρας ἀποναμένη, εἰς οὐδὲν δὲ ὄφελος ἐμοὶ γενομένη. (Hel. Aeth. 2.4.1.1-2.4.2.6)

[Theagenes and Cnemon have come across the dead body of a woman; Theagenes is convinced it’s Chariclea.] “Meanwhile Theagenes was crying out in an agony of tragic distress: ‘O unbearable blow! O god-sent disaster! What insatiable Fury can it be that has wildly reveled in our ruin, ejecting us in exile from our native land, subjecting us to perils of the sea and perils of pirate gangs, delivering us up to brigands, and despoiling us again and again of our possessions? A single one instead of all these yet remained to me, and it has now been snatched away: Chariclea has perished, stricken, she my dearest, by the hand of an enemy, holding fast, it is plain, to her virtue, and seeking to save herself, it would seem, for me! Yet [*de oun*] the hapless girl has still perished, having had no benefit herself of her maiden bloom, nor granted me any enjoyment of it.”

(36) is very similar to (34) – another assumption which had already been made manifest ('Chariclea is dead', in bold type), is taken up again and marked by οὖν. Here, δέ correlates with μέν – note that it is an example of the border zones of the cline of discontinuity I postulated in the chapter on δέ, in that δέ's function is closer to that usually associated with ἀλλά. The μέν utterance communicates an assumption ('Chariclea's plan was to save herself for me') which is denied (that is, becomes irrelevant) in the δέ utterance ('Chariclea is dead'). As such, δέ marks a highly discontinuous utterance – more specifically, an utterance which denies an assumption communicated in the previous utterance, as ἀλλά is wont to do. The presence of ὅμως ('still', 'nevertheless') also points to this interpretation – it is often used, as the LSJ notes (s.v. ὅμως II), in the apodosis after a concessive protasis, and hence indicates some kind of "incompatibility", in Iten's (2005: 25) terms, between the assumption communicated in the protasis and the one in the apodosis.⁵⁰ Let's take a closer look at the ὅμως δ' οὖν collocation, which occurs, in some order, 16 times in my corpus. After that (§5.2.4.2), I'll take a closer look at δέ and οὖν as they occur with the subordinator ἐπεί; in §5.2.4.3, I'll take a look at the difference between reactions marked by δέ and reactions marked by οὖν.

5.2.4.1 ὅμως δ' οὖν: separating mutual manifestness from discontinuity

All 16 tokens of the ὅμως δ' οὖν cluster appear in Heliodorus:

(37) «Θάρσει, ὦ ξένε» εἰποῦσα διὰ τοῦ ἑρμηνέως, συνιῆσα γὰρ⁵¹ τὴν Ἑλλάδα γλῶτταν οὐκ ἐφθέγγετο, «καὶ λέγε τίνος χρήξεις, ὡς οὐκ ἀποτευξόμενος» ἀπέπεμπε, νεύματι τοῦτο πρὸς τοὺς εὐνούχους ἐπισημήνασα. Παρεπέμπετο δὴ μετὰ δορυφορίας καὶ ὁ Ἀχαιμένης αὐθις θεασάμενος ἐγνώριζε μὲν ἀκριβέστερον καὶ τῆς ἄγαν εἰς αὐτὸν τιμῆς τὴν αἰτίαν ὑποπτεύων ἐθαύμαζεν, ἐσίγα δ' οὖν ὅμως τὰ δεδογμένα πράττων. (Hel. Aeth. 7.19.3.3-7.19.4.5)

[Theagenes meets Arsace for the first time. She wants him to feel comfortable:] "Have no fear, stranger," she said, through an interpreter (for while she understood the Greek language she did not speak it), 'and tell us what you would have, so that you will not be disappointed.' She then dismissed him, indicating her wish to the eunuchs with a nod of her head. He was being conducted by some of the bodyguard, when Achaemenes, catching sight of him again, recognized him more exactly and, suspecting the cause of

⁵⁰ Note, in this respect, the correlation with ἀλλά in (12) above: εἰ καὶ there introduces a concessive subclause, ἀλλά the assumption which is incompatible with the concessive assumption.

⁵¹ This γὰρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – it explains why the narrator says Arsace needs an interpreter.

the extraordinary honor done to him, was struck with wonder; he kept silence [*de oun omōs*], adhering to the course on which he had resolved.”

The functions of δέ, οὖν and ὅμως can be separated neatly here. Δέ forms a correlative pair with μέν – Achaemenes recognizes Theagenes more clearly than he did before (see (38) below), but he still remains quiet. While there is denial of expectation here, this is, as in (36), expressed by ὅμως – it again points to an incompatibility between the preceding assumption and this one, in that it might have been expected that Achaemenes would say something now that he recognizes Theagenes. Δέ’s function here is, as always, to indicate that the preceding assumptions remain relevant as context, while also introducing a new assumption. Οὖν, finally, points to mutual manifestness – this is not only evidenced by τὰ δεδογμένα πράττων (‘doing the things he had resolved upon’), which points to an assumption which had already been made manifest, but also by the following sequence in 7.16:⁵²

(38) Ὁ δὲ «Τοὺς ἔνδον» ἔφη «ξένους οἵτινές εἰσιν ἢ πόθεν.» «Οὐ θέμις, ὦ παῖ» πρὸς αὐτὸν ἡ Κυβέλη, «ἀλλ’ ἐχεμύθει καὶ κατὰ σαυτὸν ἔχε καὶ μηδενὶ φράζε μηδὲ ἐπιμίγνυσσὶ τὰ πολλὰ τοῖς ξένοις· οὕτω γὰρ⁵³ δέδοκται τῇ δεσποίνῃ.» Ἐκεῖνος μὲν οὖν⁵⁴ ἀπήει ῥᾶστα τῇ μητρὶ πεπεισμένος σύνηθές τι καὶ ἀφροδίσιον διακόνημα τῇ Ἀρσάκῃ τὸν Θεαγένην ὑποτοπήσας. (Hel. Aeth. 7.16.1.2-8)

[Same context as (34).] “‘It is about those inside,’ Achaemenes replied, ‘the strangers – to know who and whence they are.’ ‘That is forbidden, my son,’ she told him; ‘hold your tongue, keep this to yourself, and tell nobody; and have little or nothing to do with the strangers. This is my mistress’s decision.’ He went away in prompt obedience to his mother, surmising that Theagenes was just something ordinary and an accessory to one of Arsace’s amours.”

⁵² Additionally, αὖθις (‘again’) indicates that Achaemenes had seen Theagenes previously, and automatically activates the assumptions from the preceding meeting – in 7.15, just before the conversation in (37), Achaemenes had seen Theagenes for the first time, peering through some holes in the door separating him from Theagenes and Chariclea after hearing the latter’s lamentations (cf. 7.15.2.1-7.15.3.6). As such, Achaemenes’ first encounter with Theagenes, and the conversation with his mother which followed it (cf. (37)), are prepared by αὖθις.

⁵³ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – it explains why Achaemenes should listen to his mother. If Achaemenes interprets the preceding commands against this assumption, the preceding assumptions are more likely to become manifest to him – as such, the γάρ assumption functions as an anchor for the preceding utterance.

⁵⁴ With οὖν, the narrator indicates that the upcoming assumption is mutually manifest. In this case, it is to be expected that Achaemenes would listen to his mother – especially if she is communicating her (and Achaemenes’) master’s commands.

In this excerpt, which precedes (37), Cybele had instructed Achaemenes to stay quiet about Theagenes and Chariclea – which he agreed on (τῇ μητρὶ πεπεισμένος, ‘persuaded by his mother’). As such, the δ’ οὖν ὅμως utterance refers back to an assumption which is already mutually manifest; at the same time, the upcoming assumption is unexpected due to the information provided in the μὲν segment – this explains why ὅμως (and δέ) were inserted.

(39) ἐγὼ δὲ τοσαύτην ὑπερβολὴν ποιοῦμαι τῆς εἰς ὑμᾶς τε καὶ τὴν ἐνεγκοῦσαν εὐνοίας, ὥστε μικρὰ φροντίσας καὶ γένους διαδοχῆς καὶ πατρῶας ἀνακλήσεως, ἃ δὴ πάντα μοι διὰ τῆσδε ἔμελλεν ἔσεσθαι, θεοῖς ἱερουργεῖν ὑπὲρ ὑμῶν ἐπείγομαι. Ὅρῳ μὲν γάρ⁵⁵ ὑμᾶς δακρύνοντας καὶ ἀνθρώπινόν τι πάθος ἀναδεγμένους καὶ ἐλεοῦντας μὲν τὴν ἁωρίαν τῆς κόρης ἐλεοῦντας δὲ καὶ τὴν ἐμοὶ μάτην προσδοκηθεῖσαν τοῦ γένους διαδοχὴν· ὅμως δ’ οὖν ἀνάγκη, καὶ ὑμῶν ἴσως μὴ βουλομένων, τῷ πατρίῳ πείθεσθαι νόμῳ, τῶν ἰδίων λυσιτελῶν τὸ τῆς πατρίδος ἐπίπροσθεν ποιούμενον. (Hel. Aeth. 10.16.4.4-10.16.5.6)

[Hydaspes has finally accepted that Chariclea is his daughter. However, he still plans to offer her up to the Ethiopian gods, much to the dismay of those in attendance.] “So extreme is my affection for you and for my native land that, making light even of the succession of my line and the appellation of my father, although I was like to obtain all this through her, I am intent for your sake on performing the sacrifice to the gods. For I see you weeping and yielding to an impulse of human emotion in your pity for the untimely fate of this girl, and also in your pity for the frustration of my hopes for the succession; yet it is still [*omōs de oun*] necessary, though it be perhaps against your will, that I obey our country’s law and set the claims of our fatherland above any personal advantage.”

(39) is very similar to (37). Οὖν once again points to mutual manifestness – as in (37), it is ‘resumptive’ in the sense that it takes up an assumption which had been communicated previously. Hydaspes had already made clear that he was going to sacrifice Chariclea before the μὲν segment (θεοῖς ἱερουργεῖν ὑπὲρ ὑμῶν ἐπείγομαι, ‘I am

⁵⁵ This γάρ utterance is at least partly reformulative – the ὅμως δ’ οὖν utterance falls under its scope, and it points back to a mutually manifest assumption (see the discussion under the example). In the rest of the γάρ utterance, Hydaspes acknowledges his audience’s shocked and saddened reaction to his decision, but he also makes it clear, as stated, that it is necessary (ἀνάγκη) to perform the customary rites. In other words, the γάρ utterance anchors the preceding assumption in Hydaspes’ understanding of his audience’s pity, but it also restates his decision to do what’s necessary. As such, his audience might be more inclined to accept his decision as a reasonable one, given that the γάρ utterance anchors it in his understanding of his audience’s misgivings.

intent on sacrificing [her] to the gods for you') – the μέν utterance signals his acknowledgment that this may not be a popular decision, with the ὅμως δ' οὖν utterance explaining that it is 'nevertheless' (ὅμως) necessary to put country before personal feelings. As in (37), then, ὅμως again points to denial of expectation – the μέν segment may have given rise to the implicature that Chariclea would be saved, but that implicature is cut off by the ὅμως δ' οὖν utterance. Δέ is balanced by μέν, of course, indicating that the μέν assumption will still be relevant as a context for the interpretation of the upcoming, separate assumption.⁵⁶

In sum, the ὅμως δ' οὖν collocation provides further evidence for the non-compositionality of the δ' οὖν combination – their respective functions can be teased apart quite easily in the examples above. Indeed, it is the fact that ὅμως and δέ appear together which should garner the most attention – ὅμως is highly similar to ἀλλά, which would seem to warrant the presence of the latter (and not of δέ). The more general numbers for Heliodorus do not bear out this hypothesis either, however – ὅμως and δέ occur together 19 times in the *Aethiopica*, whereas ὅμως and ἀλλά only do so 7 times. While sample size is limited here, then, it does seem as if we are confronted with a peculiar DM combination. There are several ways to explain it, however. First of all, the discontinuity cline I proposed in §3.2.3.5 does leave room for δέ to appear in contexts in which ἀλλά would seem more likely. Second, there is the correlation with μέν – while μέν can be correlated with an ἀλλά in the next segment, it is more often balanced with δέ. Third, there is the addition of οὖν – there are no instances of the *Aethiopica* where an οὖν is added to the ἀλλ' ὅμως collocation. In other words, if οὖν points to mutual manifestness, and δέ to contextual continuity (in addition to discontinuity), then we would expect δέ to be preferable to ἀλλά in those instances where some sort of continuity is felt to be warranted – as in (36) and (39), where the ὅμως δ' οὖν utterance is obviously resumptive. The ὅμως δ' οὖν combination, then, strengthens my assumptions about both δέ and οὖν's semantics – and it also sheds light on why they occur together so often, at least in the *Aethiopica*.⁵⁷ At the same time, my proposal still maintains a clear functional distinction between their meanings, and hence does not fall into the trap of contamination – if both DMs are too similar, concerns about cognitive economy and semantic contrast would come into play.

⁵⁶ For other examples of the ὅμως δ' οὖν collocation, see e.g. Hel. *Aeth.* 4.16.4.5, 5.5.2.4 and 5.18.5.2. The last example is particularly interesting, as ὅμως δ' οὖν there marks the repetition of a question to someone who is hard of hearing.

⁵⁷ Δέ and οὖν occur together 39 times out of 217 total instances of οὖν (or 17.97%) in the *Aethiopica*. They occur much less often in the *Contra Iulianum* (4 times out of 57 total instances of οὖν, or 7.01%) and, curiously, nowhere in the *Hexaemeron* (out of 90 total instances of οὖν).

5.2.4.2 Separating δέ from οὖν (I): the case of ἐπεί

The optimal method for separating out οὖν's meaning from δέ's is to look at contexts which are highly similar, but contain only one of these DMs. Contrast the following examples:

(40) Πρὸς δὲ τὸ ἐξ ἀρχῆς ἐπανίωμεν. Ἡ δὲ γῆ ἦν ἀόρατος καὶ ἀκατασκεύαστος. Εἰπὼν, Ἐν ἀρχῇ ἐποίησεν ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν· πολλὰ ἀπεσιώπησεν, ὕδωρ, ἀέρα, πῦρ, τὰ ἐκ τούτων ἀπογεννώμενα πάθη· ἃ πάντα μὲν ὡς συμπληρωτικά τοῦ κόσμου συνυπέστη τῷ παντὶ δηλονότι· παρέλιπε δὲ ἡ ἱστορία, τὸν ἡμέτερον νοῦν γυμνάζουσα πρὸς ἐντρέχειαν, ἐξ ὀλίγων ἀφορμῶν παρεχομένη ἐπιλογίζεσθαι τὰ λειπόμενα. Ἐπεὶ οὖν οὐκ εἴρηται περὶ τοῦ ὕδατος ὅτι ἐποίησεν ὁ Θεός, εἴρηται δὲ ὅτι ἀόρατος ἦν ἡ γῆ σκόπει σὺ κατὰ σεαυτὸν τίνι παραπετάσματι καλυπτομένη οὐκ ἐξεφαίνετο. (Bas. Hex. II.3.12-23)

[Basil is returning to the verse he was discussing before he launched into a tirade against those who believe that God operated on uncreated matter.] “Let’s return to the beginning – ‘The earth was invisible and unfinished.’ In saying ‘In the beginning God created the heavens and the earth’, the sacred writer passed over many things in silence – water, air, fire and the states which resulted from them, which, all forming in reality the true complement of the world, were, without doubt, made at the same time as the universe. By this silence, the account wishes to prepare our mind towards skillfulness, providing it with few starting points, to impel it to the contemplation of the rest. When [oun] it has not been stated about water that God created it, but it is stated that the earth was invisible – you, ask yourself what could have covered it, and prevented it from being seen?”

(41) Καὶ τούτοις οὐδεὶς ἀντερεῖ, οὐκ οὖν ὅστις γε τὸ ὑπερουράνιον φῶς ἐν ταῖς τῶν ἀγαθῶν ἐπαγγελίαις ἐκδέχεται, περὶ οὗ Σολομών φησι· Φῶς δικαίοις διὰ παντός· καὶ ὁ ἀπόστολος· Εὐχαριστοῦντες Πατρὶ τῷ ἱκανώσαντι ἡμᾶς ἐν τῇ μερίδι τοῦ κλήρου τῶν ἁγίων ἐν τῷ φωτί. Εἰ γὰρ⁵⁸ οἱ καταδικαζόμενοι πέμπονται εἰς τὸ σκότος τὸ ἐξώτερον, δηλονότι οἱ τὰ τῆς ἀποδοχῆς ἄξια εἰργασμένοι, ἐν τῷ ὑπερκοσμίῳ φωτὶ τὴν ἀνάπαυσιν ἔχουσιν. Ἐπεὶ οὖν ἐγένετο ὁ οὐρανὸς προστάγματι Θεοῦ ἀθρόως περιταθεὶς τοῖς ἐντὸς ὑπὸ τῆς οἰκείας αὐτοῦ περιφερείας ἀπειλημένοις, σῶμα ἔχων συνεχές, ἱκανὸν τῶν ἔξω

⁵⁸ This γάρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand. It takes the preceding assumption (‘God empowered us to partake of light’) and draws a logical conclusion from it (‘those who do things worthy of God, will repose in light’) – note the use of δηλονότι (‘evidently’), which points to an assumption which should be obvious from what has been stated previously.

διαστῆσαι τὰ ἔνδον, ἀναγκαίως τὸν ἐναπολειφθέντα αὐτῷ τόπον ἀφεγγῇ κατέστησε, τὴν ἑξῶθεν αὐγὴν διακόψας. (Bas. *Hex.* II.5.43-55)

[Basil is discussing the verse, ‘Darkness was upon the face of the deep’. He argues that darkness is absence of light, which existed before the creation of the world.] “No one will contradict this; least of all he who looks for celestial light as one of the rewards promised to virtue, the light which, of which Solomon says, ‘It is always a light to the righteous’; and the apostle, ‘Giving thanks unto the Father, Who has made us meet to be partakers of the inheritance of the saints in light’. If the condemned are sent into outer darkness, evidently those who are made worthy of God's approval, have their rest in heavenly light. When [οὐρανὸν] the heaven, according to the order of God, appeared – enveloping all that its circumference included, an unbroken body enough to separate outer things from those which it enclosed –, it necessarily kept the space inside in darkness for want of communication with the outer light.”

(42) Ἵνα τοίνυν διδαχθῶμεν ὁμοῦ τῇ βουλήσει τοῦ Θεοῦ ἀχρόνως συνυφεστάναι τὸν κόσμον, εἴρηται τὸ, Ἐν ἀρχῇ ἐποίησεν. Ὅπερ ἕτεροι τῶν ἐρμηνευτῶν, σαφέστερον τὸν νοῦν ἐκδιδόντες, εἰρήκασιν, Ἐν κεφαλαίῳ ἐποίησεν ὁ Θεὸς, τουτέστιν, ἀθρόως καὶ ἐν ὀλίγῳ. Τὰ μὲν οὖν⁵⁹ περὶ ἀρχῆς, ὡς ὀλίγα ἀπὸ πολλῶν εἰπεῖν, ἐπὶ τοσοῦτον. Ἐπειδὴ⁶⁰ δὲ καὶ τῶν τεχνῶν αἱ μὲν ποιητικαὶ λέγονται, αἱ δὲ πρακτικαὶ, αἱ δὲ θεωρητικαί· καὶ τῶν μὲν θεωρητικῶν τέλος ἐστὶν ἡ κατὰ νοῦν ἐνέργεια, [...]. (Bas. *Hex.* I.6.28-I.7.3)

[Basil is discussing how the notion of ‘beginning’ in Genesis should be understood.] “In order, then, that we learn that, by the will of God, the world arose in less than an instant, it is said, ‘In the beginning God created’. Other interpreters, in order to convey this meaning more clearly, have said: ‘God made summarily’ – that is to say, all at once and in a moment. These things, then, suffice about the beginning – if only to put a few points out of many. Since [δε] even among arts, some are called ‘poetical’ [i.e., ‘technical’, SZ], some ‘practical’, others ‘theoretical’; and the object of the last is the exercise of thought, [...].”

(43) Ἀλκυὼν ἐστὶ θαλάττιον ὄρνεον. Αὕτη παρ’ αὐτοῦ νοσσεύει τοὺς αἰγιαλοὺς πέφυκεν, ἐπ’ αὐτῆς τὰ ὡὰ τῆς ψάμμου καταθεμένη· καὶ νοσσεύει κατὰ μέσον που τὸν χειμῶνα, ὅτε πολλοῖς καὶ βιαίοις ἀνέμοις ἡ θάλασσα τῇ γῇ προσαράσσεται. Ἄλλ’ ὅμως κοιμίζονται μὲν πάντες ἄνεμοι, ἡσυχάζει δὲ κύμα θαλάσσιον, ὅταν ἀλκυὼν ἐπώαζῃ τὰς

⁵⁹ With οὖν, Basil indicates that the upcoming assumption is mutually manifest. In this case, he brings a section of his discourse to an end – and, hence, refers back to information which is already mutually manifest. It is, of course, mutually manifest that he had been talking about the notion of ‘beginning’.

⁶⁰ Ἐπειδὴ is a synonym of ἐπεὶ.

ἐπὶ τὰς ἡμέρας. Ἐν τοσαύταις γὰρ⁶¹ μόναίς ἐκλεπίζει τοὺς νεοττούς. Ἐπεὶ δὲ καὶ⁶² τροφῆς αὐτοῖς χρεία, ἄλλας ἐπὶ πρὸς τὴν τῶν νεοττῶν αὐξησιν ὁ μεγαλόδωρος Θεὸς τῷ μικροτάτῳ ζῳῷ παρέσχετο. (Bas. Hex. VIII.5.53-62)

[Basil is giving the example of the halcyon in order to prove God's beneficence.] "The halcyon is a sea bird, which lays its eggs along the shore, depositing them in the sand. And it lays in the middle of winter, when the violence of many winds dashes the sea against the land. Yet all winds are hushed, and the wave of the sea grows calm, during the seven days that the halcyon sits. For it only takes seven days to hatch the young. Since [δε] they are also in need of food so that they may grow, God, in His munificence, grants another seven days to this most tiny animal."

The first two cases have ἐπεὶ οὖν; the latter two have ἐπεὶ δέ (see also (41)-(43) in §3.2.3.1). As such, these examples are ideally suited for differentiating between the contexts which prime the use of one or the other DM.

What separates (40) and (41) from (42) and (43)? Mutual manifestness seems to be an important part of the οὖν examples – the ἐπεὶ clause in (40) makes reference to the first verses from Genesis, which have been the subject for some time now, and have been repeated at the beginning of the excerpt quoted here. As these verses are mutually manifest, then, it is clear that the δέ part of the utterance ('it is said that the earth was invisible', εἴρηται δὲ ὅτι ἀόρατος ἦν ἡ γῆ) is mutually manifest. The first part of the ἐπεὶ clause is mutually manifest as well – it is manifest to both Basil and his audience that Genesis makes no reference to the creation of water (of all the elements, as Basil points out, only earth has been created at this point). The ἐπεὶ clause in (40), in other words, is fully mutually manifest. (41) is similar in that it starts from mutually manifest information – the fact that 'heaven came into being by God's command' (ἐγένετο ὁ οὐρανὸς προστάγματι Θεοῦ) has been mutually manifest since Basil quoted the first verse from Genesis. Note that the rest of the utterance is not mutually manifest, and would hence not fall under οὖν's scope – the same would be true on a resumptive account, but not on a POP account. The drawback of the latter account becomes clear once we take a look at (42) and (43), however – there is no way to distinguish between οὖν and δέ if οὖν is considered to be a POP marker. In (42), the ἐπεὶ clause clearly marks

⁶¹ This γὰρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to understand – it explains that the halcyon only sits seven days to hatch its young, which is not in line with the time other birds need and would perhaps raise eyebrows among Basil's audience. As such, this γὰρ utterance is a direct result of Basil's mindreading – he assumes that his audience is not aware of the sitting habits of halcyons, and hence feels the need to add the γὰρ utterance.

⁶² In both (42) and (43), we get ἐπεὶ δέ followed by focalizing καί ('also'), which points to the contextual continuity inherent in δέ utterances (see also e.g. (27), (36) and (38) in §3).

a transition to a ‘new step’ – at the same time, there is no mutual manifestness here. Basil has not referred to the distinction between different ‘arts’ (τῶν τεχνῶν) before, and this distinction cannot be considered to be inferentially accessible to the audience.⁶³ In (43), δέ performs its usual function of indicating continuity-within-discontinuity – Basil is still dealing with the halcyon, and how it proves God’s beneficence; but the δέ utterance is also clearly discontinuous, providing information about the seven days (ἄλλας ἑπτὰ) which follow the preceding ones, and which are afforded by God to the halcyon so that they can eat food. Note that this information again cannot be considered to be mutually manifest.

The difference between δέ and οὖν is perhaps borne out most clearly when comparing an ἐπεὶ δέ utterance which co-occurs with an earlier μέν, on the one hand, with an ἐπεὶ οὖν utterance on the other:

(44) Κατ’ ἀρχὰς μὲν δὴ καὶ χρόνον τῆς ἡμέρας ἐπ’ ὀλίγον ἀντείχε τοῦ τεῖχος· ἐπειδὴ δὲ ἐπιβρῖσαν τὸ ὕδωρ εἰς ὕψος τε ἤρετο καὶ διὰ τῶν ἀραιωμάτων τῆς γῆς, οἷς μέλαινα καὶ εὐγίαιος οὖσα πρὸς τῆς θερινῆς ὥρας κατέσχιστο, πρὸς τὰ βάθη κατεδύετο καὶ τὴν κρηπῖδα τοῦ τεῖχους ὑπέτρεχε. (Hel. Aeth. 9.4.3.1-6)

[The inhabitants of Syene attempt to build a mine to carry away the water which the besieging Ethiopians had diverted to their city. The plan backfires, and the Nile surges to the city.] “At first [*men*], and for some part of the day, the wall held out; when [*de*] the water, pressing on, rose higher and higher and sept low down through the cracks in the soil (which was black and loamy and fissured by the summer heats), it could make its way under the depths and foundation of the wall.”

(45) «Τὸ δὲ νυνὶ παρὰ τὴν κόρην ἴωμεν» ἔφην «ἐπισκεψόμενοί τε ἀκριβέστερον καὶ παραμυθησόμενοι πρὸς ὅσον δυνατόν. Ἄμα δέ, ὦ Χαρίκλεις, βούλομαί σε καὶ λόγους τινὰς ὑπὲρ ἐμοῦ κινήσαι πρὸς τὴν παῖδα καὶ γνωριμώτερον ἀποφῆναι παρακαταθέμενον, ὅπως ἂν οἰκειότερον ἔχουσα πρὸς με θαρραλεώτερον ἰώμενον προσίηται.» «Γινέσθω ταῦτα» ἔφη «καὶ ἀπίωμεν.» Ἐπειδὴ οὖν ἐπέστημεν τῇ Χαρικλείᾳ τὰ μὲν πολλὰ τί ἂν τις λέγοι; [...]. (Hel. Aeth. 3.18.4.1-3.19.1.2)

[Charicles is begging Calasiris to help Chariclea. Calasiris reacts:] “Now let us go to the girl’, I said, ‘so that I can examine her more closely, and comfort her as much as

⁶³ Note that the δέ utterance is not fully discontinuous – there is still continuity with the preceding context in that the upcoming utterance has to do with the verse ‘In the beginning God created the heavens and the earth’. God’s work is an example of the first type of art, meant to induce admiration from those who behold it (cf. ἵνα [...] δειχθῇ ὅτι ὁ κόσμος τεχνικόν ἐστὶ κατασκευάσμα, προκείμενον πᾶσιν εἰς θεωρίαν, “to show that the world is a work of art displayed for the beholding of all people”) – as such, the interpretation of the δέ utterance also relies on assumptions made available in the previous utterances.

possible. At the same time, Charicles, I want you to use such language about me to the girl so that it will become clear that you commend me to her better acquaintance, so that she may receive my treatment more comfortably.’ ‘Let it be so’, he said, ‘and let us go.’ When [oun] we had come in to Chariclea – why would someone tell these things at length? [...].”

There is an obvious discontinuity in (44) – the δέ utterance marks a transition to a new step in the narrative, where the wall does *not* continue to hold out, but is on the brink of collapsing. As such, there is continuity – the preceding assumption remains relevant, as the narrator is still dealing with the Syenian wall and how the Nile is wearing it down –, but also discontinuity. In (45), on the other hand, the οὖν utterance follows inferentially from the assumptions which have just communicated. Calasiris had informed Charicles that he wanted to go to Chariclea; Charicles acquiesced; as such, the fact that they have now arrived at Chariclea’s, comes as no surprise – it is mutually manifest that this will be the next step in the narrative, based on the preceding assumptions. In (44), μέν indicates that another assumption will follow which will need to be held against the assumption it marks itself. In this case, this assumption is discontinuous in a sense which simply does not occur with οὖν utterances – the latter only refer back to mutually manifest assumptions, and hence do not stray too far from previously communicated assumptions. This does *not* mean, however, that δέ cannot occur in ἐπεὶ contexts where οὖν would not seem out of place:

(46) Καὶ καταλαβὼν ἐπὶ τῆς εὐνῆς ἀφύπνισέ τε καὶ θορυβούμενον καὶ «Τίς οὐτοσί;» βοῶντα κατέστελλε «Βαγώας ἐγώ» λέγων, «ἀλλὰ φῶς ἦκειν πρόσταττε.» Προσκαλεσάμενος δὴ τι παιδάριον τῶν προσεδρευόντων, λύχνον ἄψασθαι τοὺς ἄλλους καθεύδειν ἔασαντα προσέταττεν. Ἐπειδὴ δὲ ἦκεν ὁ παῖς καὶ τὴν <δᾶδα> κατὰ λυχνούχον ἐπιθείς μετέστη, «<Τί> τοῦτο» ἔλεγεν ὁ Εὐφράτης. (Hel. Aeth. 8.12.4.1-8)

[Bagoas has arrived at Memphis with a letter from Oroondates, authorizing him to take Theagenes and Chariclea with him. He wants to inform Euphrates of his charge:] “Bagoas found the man in his bed and roused him from sleep; and in consternation Euphrates cried out ‘Who is there?’. Bagoas quieted him, saying ‘It’s Bagoas; but order a light to be brought.’ Euphrates summoned a page-boy who was in waiting, and ordered him to light a lamp without awakening the others. When [de] the boy had come in and had set the lamp on its stand and had withdrawn, Euphrates said: ‘What is it?’.”

The ἐπεὶ clause here does not seem to diverge that much from the ἐπειδὴ clause in (45). In both cases, clear reference is made to the preceding assumption – in (45), to Charicles’ and Calasiris’ decision to go and visit Chariclea; in (46), to Euphrates’ command to the page-boy to bring a lamp. As such, certain contexts may warrant the use of either (or both) δέ and οὖν – in general, it is ultimately up to the speaker to

choose which DM suits her purposes best, and to decide whether she wants to explicitly mark the upcoming assumption's mutual manifestness, or the continuity-within-discontinuity associated with the preceding utterance (or both). In (45), the focus is more on how the upcoming assumption follows straightforwardly from the previously communicated assumptions (and hence on the assumption in the ἐπεὶ clause); in (46), δέ indicates that the upcoming utterance will communicate a separate assumption – yet it also points to continuity, made explicit in the ἐπεὶ clause. The latter functions as a springboard for the upcoming conversation between Euphrates and Bagoas – the ἐπεὶ clause is relevant for the interpretation of the upcoming part of the utterance, as Bagoas will hand Euphrates a letter to read (τουτὶ τὸ γράμμα ἀναγίνωσκε λαβών, ‘take this letter and read it’). Seeing as it's the middle of the night, Euphrates will, of course, need a light to make out what the letter says.

To sum up, the difference between the οὖν and δέ utterances in (40)–(46) cannot be painted in terms of POP marking, as Wakker (2009: 70) argues. There is no obvious way to separate between the POP which οὖν would mark in (40) and the POP which presumably occurs in (42) – in the former case, οὖν does not mark more of a POP (there is a clear backwards reference to the “silence” in Scripture about “many things”, including “water”, which was already mentioned in the beginning of the excerpt⁶⁴) than δέ does in (42) (which marks a clear departure from the preceding line of thought, introducing a distinction between arts which had not been mentioned before). The same is true for e.g. (45) and (46) – both contain, as stated, roughly similar transitions, but δέ and οὖν highlights different aspects of that transition. Of course, these are just a handful of examples – but there are other contexts with οὖν which are similar to those in which δέ can occur, but which help bring out the differences between the two. Reactions constitute one of these contexts.

5.2.4.3 Separating δέ from οὖν (II): the case of reactions

As we have seen (§3.2.3.2), δέ occurs in what I will call ‘bare reactions’ – reactions which constitute a subject switch plus a neutral word of ‘saying’, followed (or interrupted) by direct speech:

(47) Ὁ δὲ Θεαγένης «Οὗτος ἐμὲ καλεῖ» πρὸς με ἔφησεν· ἐμοῦ δὲ «Πῶς τοῦτο λέγεις;» εἰπόντος? (Hel. Aeth. 4.2.2.1–3)

⁶⁴ Πολλὰ ἀπεσιώπησεν, ὕδωρ, ἀέρα, πῦρ, τὰ ἐκ τούτων ἀπογεννώμενα πάθη· ἃ πάντα μὲν ὡς συμπληρωτικά τοῦ κόσμου συνυπέστη τῷ παντὶ δηλονότι (“the sacred writer passed over many things in silence, water, air, fire and the results from them, which, all forming in reality the true complement of the world, were, without doubt, made at the same time as the universe”).

[During the Pythian games, heralds are announcing the running contest to be open for anyone who wants to challenge Ormenus, the clear favorite for the race.] “Then Theagenes said to me [i.e., Calasiris, SZ], ‘He is calling me’; I [*de*] asked, ‘How do you mean?’”

(48) Καὶ ἡ Χαρίκλεια «Πρὸς τοῖς βωμοῖς» ἔφη «τῶν θεῶν, οἷς ἱερεῖα φυλαττόμενοι συνίμεν, ἐμέ τε καὶ τοὺς ἐμὲ φύντας γνώσεσθε.» «Καὶ ποῦ γῆς εἰσιν οὗτοι;» πρὸς αὐτὴν ὁ Ὑδάσπης. Ἡ δὲ «Καὶ πάρεσιν» ἔφη «καὶ πάντως ἱεουργουμένης παρέσονται.» Μειδιάσας οὖν αὐθις ὁ Ὑδάσπης «Ὀνειρώττει τῷ ὄντι» φησὶν «ἡ ὄνειρογενὴς αὕτη μου θυγάτηρ, ἀπὸ τῆς Ἑλλάδος κατὰ μέσην Μερόην τοὺς φύντας ἀναπεμφθήσεσθαι φανταζομένη. (Hel. Aeth. 9.25.4.1-9)

[Chariclea is preparing to reveal herself to Hydaspes as his daughter.] “And Chariclea said, ‘At the altars of the gods, for which we understand that we are reserved as pious offerings, you will learn who I am and who are my parents.’ ‘And whereabouts are they to be found?’ he asked her. She [*de*] replied, ‘They are also present, and will not fail to be present also at my sacrifice.’ Hydaspes smiled [*oun*] again and said: ‘She is dreaming in truth, this dream-born daughter of mine: she imagines that her parents will be sent over from Greece to the midst of Meroe!’”

In (47), Calasiris’ reaction to Theagenes is marked by *δέ*; *εἰπόντος* is a neutral term for ‘saying’. (48) is entirely similar – Chariclea’s reaction to Hydaspes’ question is marked by *δέ*; *φησὶν* is as neutral a term for ‘saying’ as *λέγω* (of which *εἰπόντος* is the aorist participle) is. (I’ll turn to the *οὖν* utterance in (48) very shortly.) *Οὖν* occurs twice in this type of examples, also in Heliodorus (see also the first *οὖν* in (54) *infra*):

(49) οὐκ ἔστιν ὅπως ἂν ἐκεῖνος ἐξαιρεθείη τῆς ἱεουργίας· ἄλλως τε γὰρ⁶⁵ οὐκ εὐαγὲς παντάπασι περιγραφῆναι τὸ πάτριον τῆς τῶν ἐπινικίων θυσίας, καὶ ἅμα οὐδ’ ἂν ὁ δῆμος ἀνάσχοιτο, μόλις καὶ πρὸς τὴν ἐπὶ σοὶ συγχώρησιν θεῶν εὐμενεία κινηθείς.» Ἡ δὲ οὖν Χαρίκλεια «ὦ βασιλεῦ» ἔφη, «πατέρα γάρ σε καλεῖν τάχα οὐκ ἐγγίνεται, εἰ μὲν δὴ θεῶν εὐμενεία σῶμα τοῦμὸν περισέσωσται, τῆς αὐτῆς ἂν γένοιτο εὐμενείας καὶ τὴν ἐμὴν ἐμοὶ περισῶσαι ψυχὴν, ἣν ἀληθῶς εἶναί μοι ψυχὴν ἐπικλώσαντες ἴσασιν. (Hel. Aeth. 10.20.1.6-10.20.2.5)

[Despite Chariclea’s protestations, Hydaspes declares that Theagenes must be sacrificed.] “There is no possibility of delivering him from the sacrifice. For, besides the impiety of an outright rejection of the traditional thank-offering for victory, at the same

⁶⁵ This γὰρ utterance is explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – it explains why Theagenes cannot be delivered from the sacrifice.

time the people themselves would not tolerate it, after they have been hardly induced, by the gods' grace, to make the concession in your favor.' To this Chariclea [*oun*] rejoined: 'King – for perhaps I may not call you father –, if by the gods' grace my body has been saved, it would be expected of the same grace that my soul should be saved likewise, which the gods know truly to be my soul when they allotted my destiny.'⁶⁶''

As in (47) and (48), a DM is used in a bare reaction – a subject switch (in this case, to Chariclea) and a neutral verb of 'saying' (ἔφη). In this case, however, the DM used is not δέ, but οὖν. This is, then, an intriguing example right off the bat – it seems to indicate that the difference between the οὖν utterance in (49) and the δέ utterances in (47) and (48) does not lie in the fact that the utterance amounts to a reaction; rather, we need to look at the content of the reactions to see how they stack up.⁶⁷ Chariclea's reply in (49) contains a material implication which starts off from Hydaspes' words – Chariclea tries

⁶⁶ Chariclea's utterance here is based on a double use of ψυχή which is difficult to translate. Ψυχή can be used to refer to 'things which are dear to you' (cf. LSJ s.v. ψυχή I.2) – as Theagenes uses it to refer to Chariclea (see e.g. *Aeth.* 1.8.4.2) and Chariclea to refer to Theagenes (see e.g. *Aeth.* 5.2.10.1). The first ψυχή in (49) is used in this sense. The second ψυχή is used to refer to the more common use ('soul'), used here in opposition with σῶμα ('body'), which, as Chariclea points out, has been saved by the gods. Theagenes, Chariclea's ψυχή (in the first sense), is also her ψυχή (in the second sense – that is, in the sense that Theagenes and Chariclea form one soul, and that Chariclea cannot bear to live without Theagenes).

⁶⁷ The difference between the two does not reside in the fact that (49) has the DM δή (in addition to οὖν). This would require a compositional account which would assume that the presence of δή somehow triggered the use of οὖν. I am not aware of any such account. Besides, δή and δέ can also occur together from Homer onwards (see e.g. *Iliad* 9.432 and 10.252) – as well as in Heliodorus (see e.g. *Aeth.* 9.1.2.1 and 10.6.4.5) –, which seems to indicate that δή is inserted independently if the speaker thinks its use leads to enough positive cognitive effects to offset the processing effort its addition would entail. A much simpler explanation for the presence of δή in (49) would be that Chariclea's reaction is such that it triggers the possible use of both δή and οὖν. Van Ophuijsen (1993: 147) notes that δή can mark "the progression to a second idea of which the consideration naturally follows" – reactions would seem to fall under that description (cf. also Denniston 1954²: 237).

More generally, δή and οὖν do seem to have a penchant for appearing together (2x out of 23 total instances of δή (8.7%) in the *Hexaameron*, 16x out of 277 total instances of δή (5.78%) in the *Aethiopica*). Many of these cases are hard to distinguish from cases where οὖν occurs on its own – that is to say, they are clearly mutually manifest, but not clearly something else which would be able to trigger the use of δή. However, many cases are inferential (see e.g. *Hel. Aeth.* 4.16.6.1, 5.20.3.4, 7.5.4.7, 9.3.1.1 and 10.32.3.1), which may be what δή points to specifically (see van Ophuijsen's comments *supra*, where 'naturally follows' can be reimagined as 'inferentially follows'; cf. also LSJ s.v. δή III). If this is the case, it would make sense both for δή and οὖν to appear together (as stated, inferences follow mutually manifestly from mutually manifest assumptions), and also for it to be challenging to filter out δή from οὖν's meaning in those cases where they co-occur. Examples where δή appears on its own seem to warrant this 'inferential' analysis (see e.g. *Hel. Aeth.* 2.6.4.3, 3.11.1.2, 4.8.3.3, 5.20.1.1, 7.9.1.3 and 8.12.4.4), but I do not have the space to get into any details here. A broad, cognitively-based study of δή is still a *desideratum* at this point, although van Ophuijsen's (1993) remarks are certainly an intriguing starting point.

to use Hydaspes' words against him in order to save Theagenes. Hydaspes made reference to 'the grace of the gods' (θεῶν εὐμενείᾳ) which has saved Chariclea from being sacrificed (συγχώρησιν); Chariclea, in her reply which is introduced by οὖν, takes Hydaspes' assumption as input ('I have been saved by the grace of the gods'), and argues that they would want her soul to be saved along with her body, and that, by the same grace which preserved her body, her soul should be 'saved' (περισῶσαι) in the same way – the implication being that Theagenes' survival is crucial to the integrity of her soul.⁶⁸

As a material implication is a form of inferencing, and since Chariclea's protasis takes an assumption made mutually manifest by Hydaspes as input, Chariclea's reaction here is clearly based on mutual manifestness. However, given the fact that we only have one instance of οὖν with a bare reaction, it is difficult to say whether the inference Chariclea makes in (49) is part of a larger pattern in which bare οὖν reactions mark reactions based on mutual manifestness. The content of the δέ reactions in (47) and (48) are not mutually manifest in the same way as (49) is, but this does not mean that δέ cannot mark reactions based on mutual manifestness – it may be the case that δέ can mark all (or many) different types of reactions (including, perhaps, reactions based on mutual manifestness), while οὖν can mark only those reactions which are based on obvious mutual manifestness. This hypothesis requires further research and, more importantly, a larger number of reactions marked by οὖν.

Οὖν can also mark non-bare reactions. Compare (49) to the οὖν utterance in (48), which is much less neutral – although Hydaspes does 'say' something (φησίν), he does this while smiling (μειδιάσας). Hydaspes' smiling is marked twice more by οὖν, once not long before (48) (which explains the use of αὖθις, 'again', in the οὖν utterance in (48)):

(50) Ὡς δὲ καὶ ὁ ζωγρήσας τὸν Ὀροονδάτην παρῆν, «Αἴτησον ὃ βούλει» ἔφη πρὸς αὐτὸν ὁ Ὑδάσπης. Καὶ ὃς «Οὐδὲν αἰτεῖν δέομαι, βασιλεῦ» εἶπεν, «ἄλλ' εἰ καὶ σὺ τοῦτο ἐπικρίνεις, ἔχω τὸ αὐτάρκες Ὀροονδάτου μὲν ἀφελόμενος αὐτὸν δὲ προστάγματι τῷ σῶ διασωσάμενος.» Καὶ ἅμα ἐδείκνυε τὸν ξιφιστῆρα τοῦ σατράπου λιθοκόλλητόν τε καὶ πολύτιμον καὶ ἐκ πολλῶν ταλάντων κατεσκευασμένον, ὥστε πολλοὺς τῶν περιεστώτων ἐκβοᾶν ὑπὲρ ιδιώτην εἶναι καὶ πλέον βασιλικὸν τὸ κειμήλιον. Ἐπιμειδιάσας οὖν ὁ Ὑδάσπης «Καὶ τί ἂν» ἔφη «γένοιτο βασιλικώτερον τοῦ μὴ λειφθῆναι τὴν ἐμὴν μεγαλοψυχίαν τῆς τούτου φιλοπλουτίας; (Hel. Aeth. 9.23.4.1-9.23.5.3)

[Hydaspes is doling out gifts to those who distinguished themselves in battle against the Persians.] "When the man who had taken Oroondates prisoner came up, Hydaspes

⁶⁸ In the utterances following (46), Chariclea makes clear that she wants permission to sacrifice Theagenes herself 'if [the material implication made explicit in (49), SZ] is unacceptable to the Fates and will be necessary to enhance this sacred ritual with the slaughter of this foreign youth' (Εἰ δὲ τοῦτο ἀβούλητον Μοίραις εὐρίσκοιτο καὶ δεήσει πάντως τὰ ἱερεῖα κοσμήσαι σφαγιασθέντα τὸν ξένον).

said to him, ‘Ask what you please.’ ‘I have no call to ask for anything,’ he replied; ‘but if it should agree with your judgment also, I am quite satisfied to keep what I took from Oroondates, and to have saved his life as you commanded.’ With that he displayed the sword-belt of the satrap, set with jewels, an article of great value, and of workmanship costing many talents. At this many of the bystanders loudly protested that it was a treasure too fine for an ordinary person, and more suitable for a king. Hydaspes smiled at this [*oun*] and said, ‘And what could be more kingly than to not let my magnanimity remain behind in the face of this fellow’s cupidity?’”

(51) «ἽΩ σοφώτατοι» ἔλεγε «μικρὸν ἐπιμείνατε· δίκη γάρ μοι καὶ κρίσις πρόκειται πρὸς τοὺς βασιλεύοντας, ὑμᾶς δὲ μόνους καὶ τοῖς τοσούτοις δικάζειν πυνθάνομαι. Καὶ τὸν περὶ ψυχῆς ἀγῶνά μοι διαιτήσατε· σφαγιασθῆναι γάρ με θεοῖς οὔτε δυνατόν οὔτε δίκαιον εἶναι μαθήσεσθε.» Προσήκαντο ἄσμενοι τὰ εἰρημένα καὶ «ἽΩ βασιλεῦ» ἔφασαν «ἀκούεις τῆς προκλήσεως καὶ ἃ προίσχεται ἡ ξένη;» Γελάσας οὖν ὁ Ὑδάσπης «Καὶ ποία δίκη» φησὶν «ἢ πόθεν ἐμοὶ καὶ ταύτῃ; προφάσεως δὲ ἐκ ποίας ἢ ποίων ἴσων ἀναφαινομένη;» (Hel. Aeth. 10.10.1.6-10.10.2.7)

[Chariclea is begging Sisimithres and the other Gymnosophists for a trial to prove that the plan to sacrifice her is unjust.] “Excellent sages’, she said, ‘stay but a moment: I propose to bring a case for judicial hearing against these sovereign rulers, and you alone, I understand, are the judges even of persons in their position. In this trial for my life, be you the arbiters. That I should be slaughtered in sacrifice to the gods is neither possible nor just, as you shall learn.’ They gladly admitted her plea and said to the King: ‘Sire, do you hear the challenge and the allegations of the foreign woman?’ Hydaspes laughed [*oun*] and said: ‘And what sort of suit, or how grounded, can there be between me and her? And on what kind of pretext or claim of rights does she take her stand?’”

The ‘smiling’ οὖν utterance in (48) is, like the οὖν utterance in (49), inferential – although, in this case, the assumption which functions as input is not taken up again in Hydaspes’ reaction. Hydaspes infers that Chariclea’s parents will be transported from Greece to ‘the midst of Meroe’ (κατὰ μέσῃν Μερόην) based on Chariclea’s statement that her parents will be present at her sacrifice – taking into account the implicit premise that Chariclea’s parents are Greek, of course. As he believes this is impossible, he concludes that she is ‘dreaming in reality’ (ὀνειρώττει τῷ ὄντι). This is one possible way of explaining why Heliodorus (via Hydaspes) inserts οὖν here – he marks his introduction of Hydaspes’ answer with οὖν to indicate, early on, that his reaction will be mutually manifest, in order to manage the audience’s expectations about the upcoming utterance and decrease processing effort. However, it’s also possible that οὖν here applies to the utterance which frames the direct speech – that is, to μειδιάσας αὐθις ὁ Ὑδάσπης φησὶν (‘Hydaspes smiled and said’). In that case, Hydaspes’ smiling would be a result of his upcoming utterance – the idea that Chariclea’s parents would suddenly

materialize in Meroe induced his smile. Οὐν would still mark an inference, but an inference which takes Hydaspes' direct speech as input – his reaction (i.e., his smile) would be inferentially plausible on the basis of the upcoming utterance.⁶⁹

(50) is very similar. On one view, οὐν marks Hydaspes' utterance as being somehow mutually manifest – in this case, Hydaspes takes his bystanders' statement that Oroondates' jewel is 'more fit for a king' (πλέον βασιλικόν) as input, and argues, under the guise of a rhetorical question, that it is even kinglier (βασιλικώτερον – the comparative of βασιλικόν) to be magnanimous (and hence leave the jewel to his subordinate). As such, the preceding assumption is built on, as it is in the οὐν utterance in (48) – the bystanders suppose that the jewel is more fit for a king, but Hydaspes argues that it is even more fit for a king to be magnanimous (μεγαλοψυχίαν).⁷⁰ Hydaspes one-ups his audience by presenting himself as the ultimate sovereign – his utterance is based on the inference (which he assumes to be highly accessible) that it is kinglier to be magnanimous than to be decked out with the finest jewelry. One of the assumptions underlying this utterance ('Oroondates' jewel is more fit for a king') has just been mentioned and is, as such, mutually manifest; Hydaspes assumes that the other ('it is most fit for a king to be magnanimous') will be available to his audience, and hence mutually manifest as well. If οὐν applies to the utterance which frames the direct speech, however, Hydaspes' smile here would be inferentially plausible based on the upcoming utterance – he would be smiling at the fact that he is gently correcting his audience, and at the same time presenting himself as a magnanimous ruler.

It is more difficult to explain the presence of οὐν in (51). Again, Hydaspes' smile itself does not seem to be mutually manifest – except perhaps as a reaction to the content of his own words, indicating his confident belief that this suit has no chance of actually taking place. Hydaspes' words themselves can only be considered to be mutually manifest in the sense that he seems to attempt to derive the premises behind Chariclea's proposed suit. This would, then, be an example of backwards inferencing – Hydaspes takes Chariclea's (and Sisimithres') words and tries to work backwards to get at their premises. The question arises from this attempt, and he challenges Sisimithres and Chariclea to provide these premises. In that sense, οὐν would mark the narrator's

⁶⁹ Note also again the presence of αὐθις ('again'), which reinforces the mutual manifestness analysis here – if Hydaspes has smiled before (see (50)), it may be the case that his smiling here can be considered to be somewhat more expected, and hence mutually manifest.

⁷⁰ Note, in this respect, that Hydaspes' response begins with καί, which, as I argued in §3.2.3.5, points to integration (i.e., full-blown continuity).

appraisal of Hydaspes' reaction as following inferentially from the preceding assumptions.⁷¹

Theagenes' smiling is accompanied by οὖν once as well:

(52) Εἰ δὲ εὖ ποιῶν ἄτοπον δοκιμάζεις τὸ αἰτούμενον ἀλλὰ σύ γε πλάττου τὸ συγκατατίθεσθαι καὶ τρέφων ἐπαγγελίαις τῆς βαρβάρου τὴν ὄρεξιν ὑπερθέσειν ὑπότεμνε τὸ πρὸς ὅξυ τι καθ' ἡμῶν βουλευσασθαι, ἐφηδύνων ἐλπίδι καὶ καταμαλάττων ὑποσχέσει τοῦ θυμοῦ τὸ φλεγμαῖνον· εἰκός τινα καὶ λύσιν θεῶν βουλήσει τὸν μεταξὺ χρόνον ἀποτεκεῖν. Ἄλλ' ὦ Θεάγενες, ὅπως μὴ ἐκ τῆς μελέτης εἰς τὸ αἰσχρὸν τοῦ ἔργου κατολισθήσης.» Μειδιάσας οὖν ὁ Θεαγένης «Ἀλλὰ σύ γε οὐδὲ ἐν τοῖς δεινοῖς» ἔφη «τὴν γυναικῶν ἔμφυτον νόσον ζηλοτυπίαν ἐκπέφυγας. (Hel. Aeth. 7.21.4.1-7.21.5.3)

[Chariclea is advising Theagenes to act as if he's accepting Arsace's advances, so that he can buy them time to devise a plan for escaping.] "If, to your honor, you find the proposal repugnant, see that you make a pretense of compliance, and foster with promises this barbarian woman's yearning; frustrate with deferments any sharp measures that she may meditate against us; soothe with hope, and allay with assurances, the fiery heat of her indignation. It may be that the respite thus gained will even, by the gods' design, bring forth a solution. But, Theagenes, do not let your mere rehearsal send you sliding down to the vileness of performance.' Theagenes smiled [*oun*] and said: 'Hah, you now, even in the midst of danger, have not escaped that innate malady of women, jealousy.'"

Once again, there are two ways of interpreting this example. On one interpretation, οὖν applies to Theagenes' utterance – he derives what he thinks to be the implicit premise behind Chariclea's words. Chariclea doesn't want him to fall into Arsace's trap and violate his betrothal to her; Theagenes thinks she's trying to warn him because she's jealous of Arsace's interest in him. This would be another example of Heliodorus marking the introduction of an interlocutor's inference with οὖν – as in (51), we are dealing with a backwards inference (Theagenes infers the reason behind Chariclea's preceding utterances). As a straightforward inference based off the implicit assumption that women don't want men to be around women who are interested in them – which Theagenes assumes to be manifest to Chariclea –, Theagenes assumes that his utterance

⁷¹ The possibility that γελάσας οὖν is a formula cannot be dismissed out of hand. However, it occurs only sparingly across Ancient Greek literature – 6 times in Plutarch, 5x in Philostratus and 2x in Plato (there are some scattered instances in other authors – it appears 1x in Longus, 1x in the *Vita Aesopi*, 1x in John Zonaras, and 1x in Demetrius Cydones). This seems to indicate that any formula hypothesis would be exceedingly unlikely.

is mutually manifest, and hence marks it with οὖν.⁷² On the other interpretation, οὖν would mark the utterance which frames the direct speech again. As in (48) and (50), Heliodorus would assume that this is an inferentially plausible, and hence mutually manifest reaction based off of the upcoming utterance. On this view, Theagenes is smiling because he found out the true reason behind Chariclea's words – she thought she could present her plan as the (objectively) best course of action, but he sees it for what (he thinks) it is (an expression of her jealousy).

These 'smiling' examples seem to be a specific subgroup of reactions which are centered around mutual manifestness. Other types of reactions fit the same pattern:

(53) Ἰδρῶτι πολλῶ διερρεῖτο τούτων εἰρημένων, ὃ Κνήμων, καὶ δήλη παντοίως ἦν χαίρουσα μὲν ἐφ' οἷς ἤκουεν ἀγωνιῶσα δὲ ἐφ' οἷς ἤλπιζεν ἐρυθριῶσα δὲ ἐφ' οἷς ἐάλωκεν· οὐκ ὀλίγον οὖν ἐφησυχάσασα χρόνον «ἽΩ πάτερ» ἔφη «γάμον ὀνομάζεις καὶ τοῦτον αἰρεῖσθαι προτρέπεις ὥσπερ δηλὸν ὃν ἢ τὸν πατέρα συνθησόμενον ἢ τὸν ἐμοὶ πολέμιον ἀντιποισόμενον.» (Hel. Aeth. 4.11.1.1-4.11.1.7)

[Calasiris is telling Cnemon on how he advised Chariclea to follow through on her love for Theagenes and marry him. He proceeds to talk about her reaction:] “At these words of mine she perspired profusely, Cnemon, and was evidently moved by a great mixture of feelings – of joy over what she heard me say, anxiety for the chances of her hopes and bashful shame for being so captivated. For no little [oun] time did she remain silent; then she said ‘Father, you mention marriage, and urge me to decide on it, as though one were certain that it will meet with my father’s consent, or with my enemy’s aspirations.’”

Given that Chariclea is obviously stressed out over what she should do, it comes as no surprise that she remains silent – if she was ‘sweating profusely’ (ιδρῶτι πολλῶ) and dangling between joy, anxiety and shame (χαίρουσα-ἀγωνιῶσα-ἐρυθριῶσα), it is not at all unexpected that she would remain quiet, thinking about the best course of action. As such, οὖν would mark a reaction which is inferentially easily accessible – given her preceding state of mind, Heliodorus presents her remaining silent and thinking about what Calasiris has said as being mutually manifest; that is, as something which falls out naturally from the previously communicated assumptions. Alternatively, οὖν could again mark the content of the reaction – Chariclea’s direct speech would then be marked as communicating assumptions which she presents as being mutually manifest

⁷² It would seem that Lamb (1997) would prefer this interpretation – his translation seems to add οὖν to Theagenes’ direct speech (‘Hah, so you now, even in the midst...’). As always, I have deleted this reference to the DM under consideration from the translation, so that readers can make up their own minds as to how it should best be translated.

(if Calasiris urges Chariclea to act on her love, it is highly likely that she assumes that he thinks her father will agree to her decision).

(54) «ἡμεῖς δὲ ὀνειρώττειν ὡς ἀληθῶς εἰκόαμεν, ἐνύπνια μὲν καὶ φαντασίας ἐξετάζοντες, τῶν δὲ καθ' ἑαυτοὺς περίσκεψιν οὐδ' ἠντιναοῦν προτιθέντες· καὶ ταῦτα ἕως ἔξεστι, τοῦ Αἰγυπτίου τούτου (ἔλεγε δὲ⁷³ τὸν Θέρμουθιν) ἀπολειπομένου καὶ νεκροῦς ἔρωτας ἀναπλάττοντος καὶ θρηνοῦντος.» Ὑπολαβὼν οὖν ὁ Θεαγένης «ἀλλ' ὦ Κνήμων» ἔφη «ἐπειδὴ σε θεῶν τις ἡμῖν συνῆψε καὶ συνέμπορον τῶν δυστυχημάτων πεποίηκεν, ἄρχε βουλής· τόπων τε γὰρ⁷⁴ τῶν τῇδε καὶ φωνῶν ἔμπειρος καὶ ἄλλως ἡμεῖς νωθέστεροι συνεῖναι τὸ δέον, πλείονι κλύδωνι κακῶν βεβυθισμένοι.» Μικρὸν οὖν ἐπιστήσας ὁ Κνήμων τοιάδε ἔφη· «Κακῶν μὲν, ὦ Θεάγενες, ἄδηλον ὅστις πλεονεκτεῖ· ἀφθόνως γὰρ⁷⁵ κἄμοι τῶν συμφορῶν ὁ δαίμων ἐπήντησεν. Ἐπειδὴ δὲ τὰ παριστάμενα ὡς προγενεστέρῳ κελεύετε λέγειν, ἢ μὲν νῆσος ἦδε, ὡς ὁρᾶτε, ἔρημος καὶ πλέον ἡμῶν οὐδέν. [...] (Hel. Aeth. 2.16.72-2.17.2.6)

[Theagenes, Chariclea, Cnemon and Thermouthis are stuck in a cave on the brigands' island.] “[Cnemon said:] ‘We, in truth, seem to be dreaming, since we inquire into visions and apparitions instead of advancing some kind of scheme for own future – and that too while we are free to do so in the absence of that Egyptian’ – he meant Thermouthis –, ‘while he is refashioning and lamenting loves that are dead and gone.’ Theagenes spoke up [oun]: ‘Well, Cnemon,’ he said, ‘since some deity has linked you with us, and made you a fellow-voyager through our misfortunes, you be the opener of our consultation. You have a good knowledge of this region and of languages, whereas our wits are altogether too addled to devise what ought to be done; for we are overwhelmed by a huger surge of troubles.’ After a short pause [oun] Cnemon answered him thus: ‘Of troubles, Theagenes, it is doubtful who can claim to have the larger share, as the deity has deluged me also with a profusion of disasters. But since you both request me, as

⁷³ Note the δέ utterance here – it amounts to an aside by the narrator, who intervenes in Cnemon’s words to make sure we know who the referent of τοῦ Αἰγυπτίου τούτου (‘that Egyptian’) is. As in (35), the assumption communicated in the δέ utterance is clearly subsidiary – it just clarifies who the speaker is referring to. As such, we perhaps would have expected a γάρ here – if γάρ did, in fact, point to subsidiarity. However, in line with the procedural rule proposed for δέ in chapter 3, its presence here can be explained away – there is clear continuity of context (the δέ utterance’s point is to clarify a preceding assumption), but also discontinuity (direct speech is interrupted by the narrator in an aside).

⁷⁴ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – Theagenes attempts to convince Cnemon to do as he asks in the utterance preceding the γάρ utterance.

⁷⁵ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to accept – Cnemon believes that the upcoming assumption provides support for his previous assertion.

your senior, to speak of our present situation: this island as you see, is deserted, having nobody on it but ourselves. [...]"

In both cases, the fact that the respective speakers react at all could be taken to induce the insertion of οὖν. With the first οὖν, Theagenes takes the floor as a reaction to Cnemon's rebuke – Cnemon believes that they should be thinking about what to do next. As such, Cnemon's words amount to an invitation for putting forth possible plans for the future (τῶν δὲ καθ' ἑαυτοὺς περίσκεψιν οὐδ' ἦντιναοῦν προτιθέντες). Before the second οὖν utterance, Theagenes invites Cnemon to 'open their consultation' (ἄρχε βουλῆς) – in other words, the narrator presents Cnemon's reaction here as a logical consequence of (i.e., that is, as making inferential sense based on) the preceding utterance. Note that the second οὖν utterance has μικρὸν ἐπιστήσας ('after he had waited for a little while'), which may be the object of οὖν's mutual manifestness as well – it is not surprising that Cnemon would need some time to come up with an idea, given that this is, quite literally, a matter of life or death, and that they will need to come up with a solid plan to get off the brigands' island, dump Thermouthis, and reach safety. In both cases, οὖν would point to straightforward mutual manifestness – the respective reactions are inferentially in line with the assumptions which were communicated just before.

The following example demonstrates perhaps most clearly how οὖν reactions rely on mutually manifest information:

(55) Τοῦ δὲ Θεαγένους τὰ εἰρημένα παρὰ τῆς Κυβέλης τοῖς πεπραγμένοις τῇ προτεραίᾳ παρὰ τῆς Ἀρσάκης παράλληλα καθ' ἑαυτὸν ἀντεξετάζοντος, καὶ ὡς ἀτενὲς αὐτῷ καὶ ἰταμόν συνεχές τε καὶ τῶν ἀπρεπεστέρων δηλωτικὸν προσέβλεπεν ἐννοοῦντος καὶ ἀγαθὸν οὐδὲν ἐπὶ τοῖς μέλλουσι καταμαντευομένου, μέλλοντός τε ἤδη τι λέγειν πρὸς τὴν πρεσβῦτιν, ἡρέμα προσκύψασα πρὸς τὸ οὖς ἡ Χαρίκλεια «Τῆς ἀδελφῆς» ἔφη «μέμνησο ἐφ' οἷς ἂν λέγῃς.» Συνεῖς οὖν τὸ δηλούμενον «ᾧ μῆτερ» ἔφη «τὸ μὲν Ἑλληνας εἶναι καὶ αὐτὴ που μαθοῦσα τυγχάνεις. Ἀδελφοὶ δὲ ὄντες πατέρων ὑπὸ ληισταῖς ἀλόντων ἐπὶ ζήτησιν ἐξορμήσαντες χαλεπωτέραις ἐκείνων τύχαις κεχρήμεθα, [...]. (Hel. Aeth. 7.12.7.1-7.13.1.5)

[Cybele has just asked Theagenes and Chariclea to tell her who they are, so that she can tell it to her mistress Arsace.] "Theagenes then brought up for comparison together in his mind these words spoken by Cybele and the behaviour of Arsace on the previous day. He recalled with what an intent, immodest gaze she had looked upon him, continually and clearly indicative of her unchaste thoughts; and he augured nothing good in what was to ensue. He was about to speak to the old woman, when Chariclea leant over and whispered in his ear: 'Remember 'your sister' in what you may say.' He understood [*oun*] to what she was referring, and said: 'Mother, that we are Greeks you have yourself managed to learn. We are brother and sister; our parents were captured

by brigands. Wet set out in search of them, and have met with even worse misfortunes than they; [...].”

Theagenes hears Chariclea’s suggestion and infers that she means that he should refer to her as his sister (they are still keeping up the charade that they’re brother and sister). With the οὖν utterance, Heliodorus indicates that the assumption Chariclea meant to communicate has become mutually manifest, and that Theagenes will incorporate her suggestion into his upcoming utterance. As such, when he dreams up his and Chariclea’s origin story to Cybele, he makes sure to refer to her as his sister. In other words, the οὖν utterance makes clear that Theagenes has understood (συνείζ) what Chariclea meant to communicate, and hence indicates that her assumption has become mutually manifest – he has developed what Chariclea said into an explicature (i.e., he should remember to call her ‘his sister’ in what he’s going to say). In the direct speech, Theagenes has indeed taken Chariclea’s advice to heart, and refers to her as his sister – the mutually manifest assumption is put into practice.⁷⁶

This section has demonstrated that there are clear differences between οὖν and δέ. While both can appear in similar contexts (e.g. reactions), they mark different aspects of their utterances – δέ points to contextual continuity while also marking the start of a new assumption, while οὖν indicates that an upcoming assumption is mutually manifest. As stated above, however, there is obvious potential for harmonization here – οὖν and δέ can occur together, with the contextual continuity marked by δέ manifesting itself in the form of the resumption of a mutually manifest assumption, marked by οὖν. However, they operate on different aspects of the interpretation process – δέ on the process of separating assumptions from each other and the selection of contextual assumptions; οὖν on the process of deriving the explicature, as we will see.

5.2.5 Tying everything together: proposing a procedural rule for οὖν

Mutual manifestness should, as we have seen, be taken to be a broad notion. To that effect, οὖν should be taken to encode the following procedural rule:

(56) Take the upcoming assumption(s) to be mutually manifest in the sense that it/they is/are in accordance with assumptions which are themselves mutually manifest.

⁷⁶ For another example of οὖν with συνείζ, see (17) *supra*.

The key notion here is ‘in accordance with’. The above rule has no problem covering resumptive examples of οὖν utterances – these are ‘in accordance with’ mutually manifest assumptions in the straightforward sense that they just take them up again. The ‘in accordance with’ addition is necessary, however, to cover the inferential examples I have discussed – these inferences follow from preceding assumptions, but also rely on implicit information which the speaker assumes to be easily accessible for the hearer from his store of encyclopaedic information. In (20), for instance, the conclusion that they should abandon the island follows from the mutually manifest assumptions made explicit in the preceding utterances (there’s no food on the island, and there’s a chance they’ll be captured by a group of brigands), but also from the assumption that that’s not a desirable state of affairs – this latter assumption is left implicit, but is assumed by the speaker to be mutually manifest because it is so easily accessible. From a cognitive point of view, the ‘in accordance with’ part of the rule simply has to do with the fact that οὖν indicates that the upcoming assumption follows mutually manifestly from mutually manifest assumptions.

It might seem as if οὖν’s function is quite similar to δέ’s, at first glance. However, the reason for inserting δέ is to point to continuity as the *background* for a discontinuity; for οὖν, the continuity (in the form of mutual manifestness) is the focus of attention. This explains why δέ can be balanced by a preceding μέν (cf. §3.2.3.4), and οὖν cannot – an assumption marked by δέ is discontinuous in a way which is simply not applicable to οὖν. The fact that δέ has a continuous component to its semantics allows it to co-occur with οὖν, but οὖν is not in the business of separating assumptions. Compare (40) and (43): with οὖν, the focus is squarely on the mutual manifestness of the assumptions communicated in the ἐπεὶ clause; with δέ, the focus is on the upcoming, new assumption, with the preceding assumptions functioning as the springboard for the interpretation process. This explains why both can occur with ἐπεὶ – ἐπεὶ can recap previously communicated (and hence mutually manifest) assumptions, but can also prelude new assumptions in the main clause (continuity-within-discontinuity). Note, in this respect, that the continuity (and hence mutual manifestness) marked by δέ can remain implicit in the δέ utterance (as in e.g. (43)), while the entire point of inserting οὖν is to mark the upcoming (i.e., explicit) assumption as being mutually manifest.

Note also that both DMs operate on different phases of the interpretation process. Whereas δέ functions as a constraint on context selection (indicating that the upcoming assumption should be taken as the next separate entry in a continuing context), οὖν functions as a constraint on the higher-level explicature.⁷⁷ Let’s take the οὖν utterance

⁷⁷ See Blass (2000) on DMs and mutual manifestness; also the other articles in Andersen & Fretheim (2000), many of which have recourse to the notion of higher-level explicatures to analyze their DMs.

in (20) as an example again. The explicature (of the first part of the utterance, to keep matters as concise as possible) would be something like this:

(20') Chariclea, Theagenes and Cnemon should abandon the island on which they're currently located.

This is the explicature the hearer will develop from ἀπολειπτόν ἡμῖν [...] τὴν νῆσον. With the addition of οὖν, Cnemon indicates that he not only believes the upcoming utterance, but that he believes that it is mutually manifest – that is, that it is 'in accordance with' assumptions which were communicated earlier, as well as implicit assumptions which he assumes to be easily accessible and, hence, part of the mutual cognitive environment. Put differently, οὖν encodes a constraint on the higher-level explicature:

(20'') Cnemon believes that it is mutually manifest that Chariclea, Theagenes and Cnemon should abandon the island on which they're currently located.

Seen in this light, οὖν is closer to an evidential than it is to a presentational DM. Evidentials "indicate the source of knowledge" (Ifantidou 2001: 5; also Aikhenvald 2004: 4) – for example, they can indicate that the speaker is making an assumption based on perception ('I see he's wearing his track suit again'), or hearsay ('he's alleged to have killed his wife') (Ifantidou 2001: 5-6). Another type of evidentials has to do with inference – the DM so ('I had a big fight with John yesterday' – 'So did you guys break up?') indicates that the source of knowledge for the speaker's assertion is her inferential abilities (id.: 6). As we have seen in great detail, οὖν can mark inferences as well – but its 'resumptive' use is evidential too, marking the upcoming utterance as being drawn from the mutual cognitive environment. In other words, οὖν indicates that the source for the upcoming assumption is the store of mutually manifest assumptions which, the speaker assumes, have already been established (either explicitly in the preceding discourse, or implicitly as part of the hearer's existing store of encyclopaedic assumptions).

Note that, like evidentiality, the mutual manifestness assumed by the speaker (and marked by οὖν) can be misguided (cf. Aikhenvald 2004: 4). An assumption might not be mutually manifest, even though the speaker presents it as such. This opens the door for manipulative use of οὖν, under which the speaker acts *as if* the upcoming assumption is mutually manifest – and at the same time aims to block other assumptions which might be equally valid from becoming mutually manifest. This manipulative potential is especially compatible with inferences – the speaker presents the inference as if it falls out naturally from the preceding assumptions, even though that may not necessarily be the case (cf. Blass 2000: 50-1). The goal with this type of manipulation is not necessarily nefarious. The point is that οὖν can mark utterances in which the speaker tries to

persuade the hearer that her perspective is the right one, and that οὖν is one of the tools available to her to achieve that goal. Let's look at a couple of examples:

(57) Τινὰ δὲ καὶ τὴν ἐκ φύσεως κακίαν ἐπιμελείαις γεωργῶν θεραπευόμενα ἔγνωμεν· οἷον τὰς ὀξείας ροιάς, καὶ τῶν ἀμυγδαλῶν τὰς πικροτέρας, ὅταν διατρηθεῖσαι τὸ πρὸς τῇ ῥίζῃ στέλεχος σφῆνα πεύκης λιπαρὸν τῆς ἐντεριώνης μέσης διελαθέντα δέξωνται, εἰς εὐχρηστίαν μεταβάλλουσι τότε τοῦ χυμοῦ τὴν δυσχέρειαν. Μηδεὶς οὖν ἐν κακίᾳ διάγων, ἑαυτὸν ἀπογινωσκέτω, εἰδὼς ὅτι γεωργία μὲν τὰς τῶν φυτῶν ποιότητας μεταβάλλει, ἡ δὲ κατ' ἀρετὴν τῆς ψυχῆς ἐπιμέλεια, δυνατὴ ἐστὶ παντοδαπῶν ἀρρωστημάτων ἐπικρατῆσαι. (Bas. Hex. V.7.24-33)

[Basil is talking about the variety in plants and trees.] “We know besides that the care of agriculturists remedies also the natural defects of certain trees. Thus the sharp pomegranate and bitter almonds, if the trunk of the tree is pierced near the root to introduce into the middle of the pith a fat plug of pine, change to deliciousness what was the acidity of their juice. Let no one [*oun*] in sin despair of himself, when he knows that agriculture can change the qualities of plants, and the efforts of the soul to arrive at virtue can certainly triumph over all infirmities.”

Basil first informs the audience of farmers' modifications to tree juices. He then proceeds to comfort his audience by saying that sinners should not despair (ἀπογινωσκέτω) – if plant juices can be modified, the soul can be modified as well to ‘triumph over all infirmities’ (παντοδαπῶν ἀρρωστημάτων ἐπικρατῆσαι). The inference (‘you should not despair’), marked by οὖν, is based on an implicit comparison of plant juices with the soul – both can be made better if work is put into it. This is a form of manipulation – there is no *a priori* reason to assume that souls will be like plant juices; nor does Basil provide one. By marking the conclusion of the inference with οὖν, Basil attempts to circumvent close scrutiny of the similarities between plant juices and human souls, and manipulate his audience into using the similarities between the two as the basis for the inferential conclusion marked by οὖν (see also §4.2.3.6, on comparisons with γάρ). This ‘manipulation’ is not malicious in any way – Basil attempts to encourage his audience, convincing them to believe that salvation is still possible for sinners. Yet it is manipulation all the same – Basil ropes his audience into making an inference of which the foundations are shaky at best.

In (57), then, Basil relies on what Maillat & Oswald (2011) have called ‘shallow processing’. He constrains the hearer's interpretation process, making highly salient the assumption that plant juices and human souls are alike – if the audience accepts that premise, it is easier to accept his conclusion that they should not despair if they have sinned. By using οὖν, the focus shifts from the premises to the conclusion. In other words, οὖν indicates that the conclusion follows in a mutually manifest fashion from the premises, even though one of those premises – ‘plant juices and human souls are

similar’ – is not at all mutually manifest. Key here is the notion that the similarities between plant juices and human souls, implied in the premises following the conclusion in the οὖν utterance (from εἰδώς onwards), are relevant and straightforward enough to bypass the hearer’s epistemic vigilance mechanisms – that is, the mechanisms which help hearers filter out wrong or nefarious assumptions (cf. Sperber et al. 2010). Epistemic vigilance, and DMs’ role in weakening it, will be discussed in more detail in Part 3 of this dissertation.

(58) [...] ἐν ᾧ σὺ μὲν ἀπερίττω τοῦ σώματος, καὶ τῷ μηδεπώποτε τυχεῖν ἀπεπτήσας ἐξ ἀπληστίας, μέγα φυσᾶς, ὡς δὴ τι θαυμάσιον λέγων· ὅτι δὲ Χριστιανοὺς ἤλασας οὕτω πικρῶς, καὶ τοσοῦτον ἔθνος καὶ οὕτως ἱερὸν παρανάλωσας, ἐκὼν παρατρέχεις. Καίτοι γε ἐνὸς μὲν ἀνδρὸς ἀπεπτήσαντος, ἢ ἐρυγᾶς φυσικᾶς ἀφέντος, τί παρὰ τοῦτο τῷ κοινῷ βλάβος; τοσούτου δὲ διωγμοῦ κινηθέντος, καὶ τοσαύτης καινοτομηθείσης συγχύσεως, πῶς οὐκ ἀνάγκη πᾶσα τὰ Ῥωμαίων ἔχειν κακῶς, ὥσπερ οὖν καὶ ἐσχηκότα φαίνεται; (Greg. *Iul.* II.717.25-36)

[Gregory is ridiculing Julian’s essay, ‘Misopogon’:] “[...] in which book you talk about the frugality of your way of living, and of never suffering from indigestion in consequence of over-eating, as if you were talking about something astounding – but that you persecuted the Christians so bitterly, and sacrificed so great and holy a people, you willingly leave out. Yet if one individual has indigestion, or emits natural eructations, what damage is it to the public? But when so great a persecution as this is stirred up, and such great disturbance occasioned by the change, how is it not necessary that the entire Roman empire would be in bad shape, as [*oun*] also seems to have become the case?”

The effect engendered by the use of οὖν is more insidious here. Gregory draws a direct parallel between Julian’s measures (i.e., his persecution of the Christians, Χριστιανοὺς ἤλασας) and the collapse of the Roman empire – his rhetorical question as to how ‘such a persecution’ (τοσούτου διωγμοῦ) and ‘such a disturbance’ (τοσαύτης συγχύσεως) could *not* have given rise to this collapse is testament to the influence he thinks Julian’s actions had on the fortunes of the empire. The οὖν utterance caps off this line of thought perfectly – it is mutually manifest, according to Gregory, that the Roman empire indeed seems to have fallen from its pedestal (ἐσχηκότα φαίνεται). Focalizing καί (‘also’) drives this point further home as well, connecting the current state of affairs to the hypothetical presented in the pre-οὖν utterance (‘if so great a persecution as this is stirred up, and such great disturbance occasioned by the change, how is it not unavoidable that the entire Roman empire would be in bad shape?’). However, this current state of affairs may not have anything to do with the persecution ‘stirred up’ (κινηθέντος) by Julian, but may be due to any number of factors – economic decline, social upheaval, weak leadership, and so on. By using οὖν, however, Gregory presents

the empire's bad shape as following directly from his persecution of the Christians, and the 'great disturbance' it generated. While Julian's persecution may well have contributed to the empire's decline, the fact that it could have done so does not mean that it did. By presenting a material implication of which the conclusion is then adjudged to be true (and which is marked by οὖν), he acts as if the implication is true – a fallacy, since the premises need not lead to the conclusion by themselves.

(59) Τὰ μὲν δὴ καθ' ἡμᾶς ταῦτα· σοὶ δὲ πλείστη μὲν χάρις καὶ τῆς νῦν δεξιώσεως καὶ ξεναγίας· χαρίσαιο δ' ἂν πλέον εἰ καθ' ἑαυτοὺς ἡμῖν διάγειν τε καὶ λανθάνειν παράσχοις, τὴν εὐεργεσίαν ἣν ἀρτίως ἔφασκες, τὸ γνωρίζειν ἡμᾶς πρὸς Ἀρσάκην, ὑπερθεμένη, μηδὲ ἐπεισάγοις οὕτω λαμπρᾷ καὶ εὐδαίμονι τύχῃ ξένον καὶ ἀλήτην καὶ στυγνάζοντα βίον.» [...] Καὶ «ᾧ κάλλιστε νεανιῶν» ἔφη «οὐκ ἂν εἴποις ταῦτα περὶ Ἀρσάκης ἐπειδὴν εἰς πεῖραν ἔλθῃς τῆς γυναικὸς· κοινόν τι χρῆμά ἐστι πρὸς πᾶσαν τύχην καὶ πλέον ἐπίκουρος γίνεται τοῖς παρ' ἀξίαν ἔλαττον πράττουσι· καὶ Περσὶς οὖσα τὸ γένος σφόδρα ἑλληνίζει τὴν γνώμην χαίρουσα καὶ προστρέχουσα τοῖς ἐντεῦθεν, ἡθὸς τε καὶ ὁμιλίαν τὴν Ἑλληνικὴν εἰς ὑπερβολὴν ἡγάπηκε. Θαρσεῖτε οὖν, ὥς σὺ μὲν ὅσα εἰς ἄνδρας καθήκει πράξων καὶ τιμηθησόμενος, ἀδελφὴ δὲ ἡ σὴ συμπαίστρια τε καὶ συνόμιλος ἐσομένη. (Hel. Aeth. 7.13.2.1-7.14.2.10)

[Theagenes is wrapping up the made-up story he started in (52):] “This then is our story; we are most grateful to you for your present welcome and kind attentions; but you would gratify us still more if you would arrange for us to live by ourselves apart and in seclusion, and defer the favor that you proposed for us just now, of introducing us to Arsace, rather than disturb the splendor and wellbeing of her state with the strange and forbidding intrusion of our vagabond existence.” [...] [Cybele responds:] ‘Young man of surpassing beauty’, she said, ‘you will not speak thus of Arsace when you have had some experience of that lady. She is a person familiar with every sort and condition, and is prompter to assist those who are undeservedly less prosperous. A Persian by birth, she is very much a Greek at heart, delighting in people from that country and quick to give them a welcome. For the manners and society of Greeks she has an immense affection. Take heart [oun] from the thoughts that you will be treated as handsomely and honorably as befits a man, while your sister will give the lady her fellowship and companionship.’”

Cybele is trying to persuade Theagenes to go and see Arsace. He had first declined the invitation, stating that he didn't want to disturb her 'splendor and wellbeing' (λαμπρᾷ καὶ εὐδαίμονι τύχῃ) with his (and Chariclea's) demeanor – Calasiris has just died, and they are pretty distraught over their loss. Cybele attempts to dispel this notion by arguing that Arsace is a very helpful person (ἐπίκουρος), and that she loves Greek people and culture (ἡθὸς τε καὶ ὁμιλίαν τὴν Ἑλληνικὴν εἰς ὑπερβολὴν ἡγάπηκε). She marks her conclusion with οὖν, stating that Theagenes and Chariclea should 'take heart'

(θαρσεῖτε) from the fact that they will be treated very well by Arsace. In this sense, Cybele tries to trump the assumptions which gave rise to Theagenes' unwillingness to go see Arsace by offering up assumptions which would lead him to accept her invitation – in other words, she believes that the warm welcome which Theagenes and Chariclea will receive (which follows itself from the premise that Arsace is very helpful towards people who are in trouble, and the premise that she loves Greeks) will be more salient to Theagenes than his apprehensions about how his and Chariclea's misery will disturb Arsace's 'splendor and wellbeing'. As in the other examples, οὖν marks the conclusion as being mutually manifest, as Cybele hopes it is – she hopes that Theagenes accepts the preceding premises; that the οὖν conclusion falls out automatically; and that the prospect of Arsace's warm welcome – which is presented as a given (i.e., as being mutually manifest) with οὖν, flowing from Arsace's helpfulness and Philhellenism – will trump his reservations about disturbing her.

(60) Ἐπὶ τούτοις ἡ Βλεμμύων παρήει πρεσβεία, τόξα τε καὶ βελῶν ἀκίδας ἐκ δρακοντείων ὀστῶν εἰς στέφανον διαπλέξασα καὶ «Ταῦτά σοι» ἔλεγον «ὦ βασιλεῦ, τὰ παρ' ἡμῶν δῶρα, πλούτου μὲν τοῦ παρὰ τῶν ἄλλων λειπόμενα, παρὰ δὲ τὸν ποταμὸν ὑπὸ σοὶ μάρτυρι κατὰ Περσῶν εὐδοκιμήσαντα.» «Πολυτελέστερα μὲν οὖν» ἔφη ὁ Ὑδάσπης «τῶν πολυταλάντων ξενίων, ἃ γε καὶ τὰ ἄλλα νυνὶ μοι προσκομίζεσθαι γέγονεν αἴτια.» (Hel. Aeth. 10.26.2.4-10.26.3.3)

[Hydaspes is giving audience to the ambassadors of his different client nations.] "Next came the embassy of the Blemmyes, carrying bows and arrows pointed with python's bone, which they had interlaced so as to form a crown. 'These', they said, 'King, are the gifts that we present to you; they do not compare in costliness with those of the other missions; but along the riverside, as you have witnessed, they have shown their worth in war against the Persians.' 'They are more precious [*oun*],' said Hydaspes, 'than gifts of many talents' value – they have become the cause of the others too being brought to me today.'"

The inference here centers around a divergent conception of worth. The Blemmyes present their arms (in the form of a crown) to Hydaspes, almost apologizing for the meanness of their gift – other envoys had brought spices or gold, which are, of course, much more costly. Hydaspes, however, turns the table on them – he believes these gifts, are in fact, more valuable, since they proved their worth in battle and hence gave Hydaspes the opportunity to receive the other gifts. The Blemmyes' conception of worth is economical in nature, while Hydaspes' is more utilitarian – if something can open the door for more gain in the future, it is more valuable than something which is worth more in absolute, economic terms. From an inferential point of view, the Blemmyes ambassadors and Hydaspes both take the same premise as input ('the Blemmyes are offering their weapons from the battle against the Persians as a gift'), but

due to their different views on worth (and hence the different premises which combine with the first one), their respective inferences differ greatly:

(60') [Blemmyes' inference]

- a. Premise 1: We are offering our weapons from the battle against the Persians as a gift to Hydaspes.
- b. Premise 2: Weapons are less valuable than spices or gold.
- c. Conclusion: Our gift does not compare in costliness with those of the other embassies (πλούτου μὲν τοῦ παρὰ τῶν ἄλλων λειπόμενα).

(60'') [Hydaspes' inference]

- a. Premise 1: The Blemmyes are offering their weapons from the battle against the Persians as a gift to me.
- b. Premise 2: The weapons they used have given me the chance to receive the other gifts.
- c. Conclusion: The Blemmyes' gifts is more valuable (πολυτελέστερα) than other gifts.

In a sense, then, Hydaspes is using the Blemmyes' assumption (i.e., premise 1 in (60') and (60'')) against them. He is attempting to manipulate the Blemmyes – not maliciously, but playfully – as an attempt to praise the Blemmyes and show his appreciation for their gift. He attempts to persuade them that it is much more straightforward (i.e., mutually manifest) to regard their gifts as being more precious than the other ones if premise 2 is mutually manifest as well (it is made explicit in ἃ γε καὶ τὰ ἄλλα νυνὶ μοι προσκομίζεσθαι γέγονεν αἴτια, 'which are the cause that all the others are now also being brought to me'). His inference is marked by οὖν, subtly nudging the Blemmyes to accept his conclusion as following mutually manifestly from what he assumes to be mutually manifest assumptions (premises 1 and 2).

(50) is very similar to (60) – and, not coincidentally, also an utterance of Hydaspes'. In (50), as in (60), Hydaspes uses his interlocutor's words against them in a playful fashion. Hydaspes' audience argued that he could not give a gift to a subordinate, as it was only fit for a king; Hydaspes reacts by asking the rhetorical question as to what could be 'more kingly' than being magnanimous in the face of his interlocutor's cupidity. Again, Hydaspes takes the same premise as his audience did, but combines it with another one than his audience does:

(50') [Audience's inference]

- a. Premise 1: Hydaspes' subordinate wants a kingly gift.
- b. Premise 2: Things which belong to a king, should be left to a king only.
- c. Conclusion: Hydaspes cannot give his subordinate the gift.

(50'') [Hydaspes' inference]

a. Premise 1: Hydaspes' subordinate wants a kingly gift.

b. Premise 2: It is more kingly to be magnanimous in the face of cupidity.

c. Conclusion: Hydaspes should give his subordinate the gift (as a show of magnanimity).

Hydaspes takes his audience's assumption (premise 1) but combines it with a different assumption (premise 2 in (50'')), which he presents as being mutually manifest. This assumption would trump premise 2 in (50') – the implicit answer to the rhetorical question, of course, is that *nothing* is more kingly than being magnanimous in the face of cupidity (cf. also the comparative βασιλικώτερον, 'more kingly', which points to the fact that Hydaspes presents this assumption as being more relevant than the preceding one). Premise 2 in (50''), like premise 2 in (60''), may well be a mutually manifest assumption – people prefer a magnanimous ruler, and would likely see magnanimity as one of the defining qualities of a decent king.

More importantly, however, Hydaspes *presents* the premise as being mutually manifest by marking it with οὐν, which will lead the hearer to accept it even more quickly and easily. If the audience accepts this premise, they will accept the conclusion in (50'') over the one in (50'), and hence follow Hydaspes' line of thinking. Note that Hydaspes again uses his audience's words against them. They argue that the gift is kingly (βασιλικόν); Hydaspes, in his reaction, uses the comparative βασιλικώτερον to indicate that, if 'kingliness' is the yardstick, his conclusion is more relevant. As such, his conclusion might seem even more valid to his audience – he takes his audience's benchmark, and argues that his conclusion is more in line with *their own* benchmark. This is the same strategy he applies in (60) – there, he turns the notion of 'value' on its head, arguing that 'value' should be interpreted differently than the Blemmyes do. This is in line with οὐν's function – Hydaspes, in both cases, takes mutually manifest concepts ('value' and 'kingliness') introduced by his audience, agrees that they are relevant, but argues that they should be construed along the lines he suggests. 'If 'value' or 'kingliness' is what we're looking for', he seems to argue, 'then my way of looking at these concepts seems more sound than your own, doesn't it?' Since his own construal of these concepts is easy to understand and accept, and οὐν leads the hearer to treat it as such, his conclusion will be perfectly acceptable to his audience – which doesn't mention the fact that, as a king, his audience will be more inclined to agree with his point of view anyway. Both (50) and (60) show, then, a skilled orator, who recognizes that the most effective persuasive strategy is to use your interlocutor's words against him/her – οὐν plays an important role in that strategy, presenting, as always, the upcoming assumption as being mutually manifest.

5.2.6 A loose end: the γὰρ οὖν collocation. A reaction to Bakker (2009).

I want to end my analysis of οὖν by looking at the collocation γὰρ οὖν. Since my corpus contains only two instances of this collocation, however, I want to expand this analysis into a more extensive discussion of Stéphanie Bakker's (2009) study – according to her, οὖν in γὰρ οὖν clusters indicates that its utterance contains information which is “known, inferable or expected” (2009: 52). She provides several examples, the most interesting of which are the following:⁷⁸

(61) Ἄλλ' ἐπιθυμία δοκεῖ τίς σοι εἶναι, ἥτις ἡδονῆς μὲν οὐδεμιᾶς ἐστὶν ἐπιθυμία, αὐτῆς δὲ καὶ τῶν ἄλλων ἐπιθυμιῶν;

Οὐ δῆτα.

Οὐδὲ μὴν βούλησις, ὥς ἐγῶμαι, ἢ ἀγαθὸν μὲν οὐδὲν βούλεται, αὐτὴν δὲ καὶ τὰς ἄλλας βουλήσεις βούλεται.

Οὐ γὰρ οὖν.

Ἔρωτα δὲ φαίης ἄν τινα εἶναι τοιοῦτον, ὃς τυγχάνει ὦν ἔρωσ καλοῦ μὲν οὐδενός, αὐτοῦ δὲ καὶ τῶν ἄλλων ἐρώτων;

Οὐκ, ἔφη, ἔγωγε. (Plato, *Charmides* 167e1-9)

[Socrates:] “Now, do you think there is any desire which is the desire, not of any pleasure, but of itself and of the other desires?”

[Charmides:] Surely not.

[Socrates:] Nor, again, is there a wish, I imagine, that wishes no good, but wishes itself and the other wishes.

[Charmides:] Quite so; there is not.

[Socrates:] And would you say there is any love of such a sort that it is actually a love of no beauty, but of itself and of the other loves?

[Charmides:] Not I, he replied.” (example and tr. Bakker (2009: 45-46))

(62) {ΞΕ.} Πρῶτον μὲν κίνησιν, ὥς ἔστι παντάπασιν ἕτερον στάσεως. ἢ πῶς λέγομεν;

{ΘΕΑΙ.} Οὕτως.

{ΞΕ.} Οὐ στάσις ἄρ' ἐστίν.

{ΘΕΑΙ.} Οὐδαμῶς.

{ΞΕ.} Ἦ ἐστι δέ γε διὰ τὸ μετέχειν τοῦ ὄντος.

{ΘΕΑΙ.} Ἦ ἐστιν.

⁷⁸ Here, I diverge from my promise not to give any translations of the DMs under consideration – I will provide Bakker's translation of the cluster, since there would be no real translation except for ‘No’ (οὐ) in these next few instances otherwise. Bakker's translation also gives some added sense of how she understands the roles of γὰρ and οὖν in these instances.

{ΞΕ.} Αὐθις δὴ πάλιν ἡ κίνησις ἕτερον ταύτοῦ ἐστίν.

{ΘΕΑΙ.} Σχεδόν.

{ΞΕ.} Οὐ ταύτὸν ἄρα ἐστίν.

{ΘΕΑΙ.} Οὐ γὰρ οὖν. (Plato, *Sophist* 255e11-256a6)

[The stranger is discussing whether motion and rest both ‘are’.]

[Stranger:] “Take motion first; we say that it is entirely other than rest, do we not?”

[Theaetetus:] We do.

[Stranger:] Then it is not rest?

[Theaetetus:] Not at all.

[Stranger:] But it exists, by reason of its participation in being.

[Theaetetus:] Yes, it exists.

[Stranger:] Now motion again is other than the same.

[Theaetetus:] You’re about right.

[Stranger:] Therefore it is not the same.

[Theaetetus:] Indeed, it is not.” (example and tr. Bakker (2009: 55))

Bakker (2009: 45) only states that οὖν in (61) cannot be considered to mark a “more relevant step in the discussion”, but provides no further analysis. As to (62), Bakker (2009: 55) argues that “[a]fter all his positive reactions to the preceding steps in the argumentation, the stranger may expect Theaetetus to agree with the last statement” as well – as such, Theaetetus’ affirmation is ‘highly expectable’, in Bakker’s terms. Both can be subsumed under the mutual manifestness hypothesis – in (61), Charmides takes up (i.e., confirms) an assumption which has been communicated by Socrates; (62) is the same in that Theaetetus confirms the stranger’s inference (motion is not identical to ‘the same’, so it is not ‘the same’). Note that, in both cases, the interlocutor to whom Charmides and Theaetetus react (that is, Socrates and the stranger, respectively) present the assumption which is subsequently confirmed less as a question than as an assertion – in (61), ὥς ἐγὼ μαι (‘as I think’) points to Socrates’ belief that the upcoming assumption is true; in (62), ἄρα points to the inferential quality of the upcoming assumption (and hence to its unimpeachability, at least if the premises are accepted – as they are here; cf. LSJ s.v. ἄρα B). Compare Charmides’ three answers in (61) – only the second one contains οὖν (and γάρ). In the first reaction, Socrates asks Charmides for his opinion (δοκεῖ [...] σοι, ‘does it seem [...] to you?’); in the last reaction, Socrates also leaves the answer up to Charmides (φαίης ἄν, ‘would you say?’) – although this latter question may seem to be, at the very least, somewhat loaded, it is still different from the second reaction, marked by γὰρ οὖν, in which Socrates doesn’t really ask a question, but, instead, produces an assertion. In other words, only the second reaction contains a confirmation of an assumption presented as being mutually manifest. In both (61) and (62), οὖν confirms that the previous assumption is indeed mutually manifest.

Γάρ performs its usual function here as well. Bakker (2009) would call this function ‘explanatory’, but it is better described, as I argued in the previous chapter, in terms of contextual anchoring.⁷⁹ The speaker uses γάρ to indicate that he attaches his confirmation to the preceding utterance – that is, he indicates that the speaker of the previous utterance can indeed yield the positive cognitive effects he intended to, as he also thinks the preceding assumption holds true.⁸⁰ As such, a compositional approach is hardly required to explain these utterances. Γάρ and οὖν perform their usual function – γάρ provides an anchor for the preceding utterance, indicating that the assumption it marks helps in the derivation of the positive cognitive effects associated with the preceding utterance; οὖν marks the speaker’s belief that the preceding assumption is mutually manifest. I’ll give one more example:

(63) {ΣΩ.} Λείπεται τοίνυν τὰ ψευδῆ δοξάσαι ἐν τῷδε, ὅταν γινώσκων σὲ καὶ Θεόδωρον, καὶ ἔχων ἐν ἐκείνῳ τῷ κηρίνῳ ὥσπερ δακτυλίων σφῶν ἀμφοῖν τὰ σημεῖα, διὰ μακροῦ καὶ μὴ ἱκανῶς ὁρῶν ἄμφω προθυμηθῶ, τὸ οἰκεῖον ἑκατέρου σημείου ἀποδοῦς τῇ οἰκείᾳ ὄψει, ἐμβιβάσας προσαρμόσαι εἰς τὸ ἐαυτῆς ἵχνος, ἵνα γένηται ἀναγνώρισις, εἴτα τούτων ἀποτυχῶν καὶ ὥσπερ οἱ ἔμπαλιν ὑποδούμενοι παραλλάξας προσβάλω τὴν ἑκατέρου ὄψιν πρὸς τὸ ἀλλότριον σημεῖον, ἢ καὶ οἷα τὰ ἐν τοῖς κατόπτροις τῆς ὄψεως πάθη, δεξιὰ εἰς ἀριστερὰ μεταρρεούσης, ταῦτὸν παθὼν διαμάρτω· τότε δὴ συμβαίνει ἢ ἑτεροδοξία καὶ τὸ ψευδῆ δοξάζειν.

{ΘΕΑΙ.} Ὡς γάρ, ὦ Σώκρατες. θαυμασίως ὡς λέγεις τὸ τῆς δόξης πάθος.

{ΣΩ.} Ὡς τοίνυν καὶ ὅταν ἀμφοτέρους γινώσκων τὸν μὲν πρὸς τῷ γινώσκῃ αἰσθάνωμαι, τὸν δὲ μὴ, τὴν δὲ γνῶσιν τοῦ ἑτέρου μὴ κατὰ τὴν αἴσθησιν ἔχω, ὃ ἐν τοῖς πρόσθεν οὕτως ἔλεγον καὶ μου τότε οὐκ ἐμάνθανες.

{ΘΕΑΙ.} Οὐ γὰρ οὖν. (Plato, *Theaetetus* 193c9-193d9)

[Socrates:] “Then the possibility of forming false opinion remains in the following case: when, for example, knowing you and Theodorus, and having on that block of wax the imprint of both of you, as if you were signet-rings, but seeing you both at a distance and indistinctly, I hasten to assign the proper imprint of each of you to the proper vision, and to make it fit, as it were, its own footprint, with the purpose of causing recognition;¹ but I may fail in this by interchanging them, and put the vision of one upon the imprint of the other, as people put a shoe on the wrong foot; or, again, I may

⁷⁹ There can be no doubt that γάρ (and not οὖν) points to the confirmation – see e.g. Plato, *Parmenides* 134b10, *Theaetetus* 186e8 and *Phaedo* 104d11 for examples of οὐ γάρ, without οὖν, which are used in confirmatory contexts.

⁸⁰ While Socrates can often be facetious and it is part of his shtick to ask questions to which the answer is already clear, the underlying mechanism remains the same – he is still producing an assertion which his interlocutor confirms via a γάρ utterance.

be affected as the sight is affected when we use a mirror and the sight as it flows makes a change from right to left, and thus make a mistake; it is in such cases, then, that interchanged opinion occurs and the forming of false opinion arises.

[Theaetetus:] I think it does, Socrates. You describe what happens to opinion marvelously well.

[Socrates:] There is still the further case, when, knowing both of you, I perceive one in addition to knowing him, but do not perceive the other, and the knowledge which I have of that other is not in accord with my perception. This is the case I described in this way before, and at that time you did not understand me.

[Theaetetus:] No, I did not.” (tr. Fowler 1921)

Socrates confronts Theaetetus with his earlier lack of understanding (μου τότε οὐκ ἐμάνθανες) – in his answer, Theaetetus confirms his earlier words, and hence confirms that Socrates’ assumption (i.e., that Theaetetus did not understand him earlier) is mutually manifest.

Bakker’s approach to οὖν is both fully compositional and non-unitary, as mentioned in the beginning of this chapter.⁸¹ She argues that its function in γὰρ οὖν utterances differs from its usual function (2009: 58) – in the former case, it marks the upcoming information as ‘already familiar’ or ‘highly expectable’; in the latter case, she follows e.g. Sicking (1993) and Van Ophuijsen (1993) in analyzing οὖν as a POP marker which indicates a transition to a higher level of the discourse hierarchy. There is a certain irony here – I would argue that Bakker’s proposal for οὖν’s meaning in γὰρ οὖν is actually closer to its actual (i.e., general) meaning than her proposal for its general meaning is. Following Grice’s Modified Occam’s Razor, I also believe (and hope to have shown) that its meaning should be construed in non-compositional terms, and that its

⁸¹ Drummen (2015: 130) takes the same view with the combination μὲν οὖν, arguing that “[i]n some instances, [...] each particle retains its own separate function; in others it is used as a cluster”. In the latter case, then, it is used compositionally. However, she provides no criteria which would help distinguish between the two. While her ‘cluster’ use examples (2015a: 132) are quite interesting, this is due to the fact that μὲν seems to occur without a counterpart (such as δέ) in most of these examples – but οὖν still carries out its usual function of indicating mutual manifestness.

I have provided several examples of the μὲν οὖν cluster in this chapter myself (see e.g. (15), (25) and (29) *supra*). As always, I believe that these examples do not warrant more or different attention than examples in which οὖν (or μὲν) occurs separately. These examples can all be analyzed non-compositionally without any difficulties – that is, both μὲν’s and οὖν’s function here does not differ from when they appear on their own. Μὲν points forward, indicating that the upcoming assumption should be kept in mind for the following utterance as well, while οὖν points to mutual manifestness. These two functions exist independently from each other – at the same time, there is nothing to preclude them from occurring together.

collocation with γάρ can be explained away by having recourse to their usual functions as they were conceived in this and the preceding chapter.

The two examples of γάρ οὖν in my corpus can be analyzed after the same fashion – and, in fact, can be analyzed along the lines Bakker (2009) has proposed (i.e., it is ‘known, inferable or expected’):

(64) Τὰ τῆς πρώτης ἡμέρας ἔργα, μᾶλλον δὲ τὰ τῆς μιᾶς· μὴ γὰρ οὖν ἀφελώμεθα αὐτῆς τὸ ἀξίωμα, ὃ ἐν τῇ φύσει ἔχει, παρὰ τοῦ κτίσαντος καθ’ ἑαυτὴν ἐκδοθεῖσα, οὐκ ἐν τῇ πρὸς τὰς ἄλλας συντάξει ἀριθμηθεῖσα. (Bas. *Hex.* III.1.1-4)

[Basil begins his third homily.] “These were the works of the first day, or rather of one day. Let us not [*gar oun*] take from it the privilege it enjoys by its very nature – having been for the Creator a day apart, a day which is not counted in the same order as the others.”

This instance is pretty straightforward. Γάρ introduces an utterance which explains why Basil corrects himself (it’s not ‘the first day’, but rather (μᾶλλον δέ) ‘one day’) – it provides contextual assumptions which ensure that the audience derives the speaker-intended positive cognitive effects from the previous utterance (with the γάρ utterance, the contextual assumptions associated with ‘one day’ are activated – the first day is a day apart). The presence of οὖν is easily explained as well – Basil here has recourse to assumptions which he had already made mutually manifest in his preceding homily (see Bas. *Hex.* II.8.56-58⁸²).

The other example is from Heliodorus:

(65) Αὐτὸς δὲ τὸ μέσον κατελάμβανεν, ἄρματός τε δρεπανηφόρου λαμπρῶς ἐπιβεβηκὼς καὶ ὑπὸ τῆς ἐκατέρωθεν φάλαγγος εἰς ἀσφάλειαν δορυφορούμενος τοὺς καταφράκτους ἱππέας μόνους ἑαυτοῦ προέταττεν, οἷς δὴ καὶ πλέον θαρσύνσας τὴν μάχην ἀπετόλμησε· καὶ γὰρ οὖν καὶ ἔστιν ἥδε ἡ φάλαγξ Περσῶν ἀεὶ τὸ μαχιμώτατον καὶ οἶονεὶ τεῖχος ἀρραγὲς τοῦ πολέμου προβαλλόμενον. (Hel. *Aeth.* 9.14.3.1-8)

[The narrator is discussing the line-up of the Persian troops before their battle with the Ethiopians.] “[Oroondates] himself took the centre, sitting magnificently in a scythe-bearing chariot and for safety surrounded by troops of spearmen on either side, while in front of him were posted the spear-wielding cataphracts alone, upon whom he trusted to join issue with his enemies. And it [*gar oun*] also is this phalanx which is of all Persians

⁸² Τοῦ γὰρ μοναχοῦ ἀκοινωνήτου πρὸς ἕτερον ἢ τὸν χαρακτῆρα δεικνύουσα, οἰκείως καὶ προσφυῶς προσηγορεύθη μία. – “It was fit and natural to call one the day whose character is to be one wholly separated and isolated from all the others.”

always the most bellicose, and which is set before the others as, as it were, an invincible wall.”

(65) is less straightforward than (64). The presence of γάρ is again easily explained – the γάρ utterance provides assumptions which make the preceding utterance easier to understand, and hence anchors the previous assumption in another one. With the γάρ utterance, in other words, the preceding utterance achieves the intended positive cognitive effects – the assumption that Oroondates trusted upon this cohort (θαρσήσας) to win the battle against the Ethiopians is grounded in the assumptions that they are very bellicose (μαχιμώτατον) and that they are ‘like a wall’ (οἶονεὶ τεῖχος). By adding the γάρ utterance, the previous utterance becomes easier to accept and understand, and hence will yield the speaker-intended positive cognitive effects.

Whereas the γὰρ οὖν utterance in (64) was clearly mutually manifest in that it referred back to assumptions which had already been made mutually manifest, the same cannot be said for (65). The γὰρ οὖν utterance here provides ‘new’ information in the sense that it divulges information which had not yet been made mutually manifest – as such, οὖν would not mark ‘resumptive’ (or, in Bakker’s terms, ‘familiar’) assumptions here. However, it does mark information which is inferentially available (or, in Bakker’s terms, ‘highly expectable’). Consider the following example, from Bakker (2009: 52):

(66) τὰ μὲν οὖν⁸³ παρεληλυθότα τῶν εἰρημένων πλήν βραχέων ἐπιδέδεικται τὰ διὰ νοῦ δεδημιουργημένα· δεῖ δὲ καὶ τὰ δι’ ἀνάγκης γιγνόμενα τῷ λόγῳ παραθέσθαι. μεμειγμένα γὰρ οὖν ἢ τοῦδε τοῦ κόσμου γένεσις ἐξ ἀνάγκης τε καὶ νοῦ συστάσεως ἐγεννήθη. (Plato, *Timaeus* 47e3-48a2)

“The foregoing part of our discourse, save for a small portion, has been an exposition of the operations of Reason; but we must also furnish an account of what comes into existence through Necessity. As a compound [*gar oun*] was this Cosmos in its origin generated, from the combination of Necessity and Reason.” (tr. Bakker, with alterations)

The information presented in the γὰρ οὖν utterance was not made manifest previously, but it can be inferred from the assumptions which have been made manifest – Socrates wants to give an account of the Cosmos; he has discussed Reason; and he states that he should also discuss ‘what comes into existence through Necessity’ (τὰ δι’ ἀνάγκης γιγνόμενα). In Bakker’s terms, the οὖν utterance ‘legitimizes’ the transition to

⁸³ With οὖν, Plato refers back to mutually manifest information – τὰ παρεληλυθότα refers to ‘things which have been passed’ (i.e., which have been discussed), which have obviously been about ‘the operations of Reason’.

Necessity by presenting the communicated assumption as being ‘familiar’ (2009: 52-53). (65) is similar – although the information that the Persian cataphracts are ‘always the most bellicose of all the Persians’ and that they function ‘as a wall’ in front of the other troops, is not mutually manifest, it can be inferred from the assumption that (a) Oroondates placed them in front of him; and (b) that he trusted them to take the fight to the Ethiopians. Based on previously communicated assumptions, as well as existing assumptions which the speaker assumes to be available from the audience’s store of encyclopaedic knowledge (e.g. ‘you would want troops in the center of your formation which would (be able to) protect the other soldiers’ and ‘if you trust on a certain contingent of troops to take the battle to the enemy, they will be your most bellicose troops’), then, the γὰρ οὖν utterance is mutually manifest in the sense that the speaker presents it as being easily inferable from other assumptions. In this sense, Bakker’s analysis of οὖν (more specifically, of οὖν in γὰρ οὖν utterances) can be recast in relevance-theoretic terms – her notions of ‘familiarity’, ‘inferability’ and ‘expectedness’ can be reanalyzed in terms of mutual manifestness.

5.3 Conclusions

Earlier approaches were very close to the semantic analysis of οὖν I have proposed here. The main problem, to my mind, is that they have danced around the core of its meaning – that is, the mutual manifestness it points to. The three-way distinction between ‘resumptive’, ‘progressive’ and ‘inferential’ οὖν, for instance, can be folded into one overarching function – resumptive utterances point back to mutually manifest information; inferential utterances fall out mutually manifestly from mutually manifest premises; and progressive οὖν utterances start from mutually manifest information. The idea that οὖν marks information which is ‘more relevant’ than what precedes, was found to leave a host of examples out of the equation – as already noted by Bakker (2009). In addition, this function is derivative – while οὖν may indeed mark utterances which may be considered to mark a ‘more relevant step’ in coherence terms, the element which ties together οὖν utterances is, in fact, the observation that it marks mutually manifest assumptions. For example, οὖν may mark a return to the main line of discourse after a digression, but its use is induced by the fact that the utterance it marks harks back to mutually manifest information.

The notion of mutual manifestness is a core element of the relevance-theoretic framework (Sperber & Wilson 1995²: 38-46; Clark 2013: 115-117). Communication can work only if speakers and hearers are both aware of which assumptions are mutually manifest (i.e., part of the mutual cognitive environment) – by using οὖν, the speaker

makes clear that the upcoming assumption is already mutually manifest, and hence helps the hearer keep track of the assumptions necessary for deriving the speaker-intended interpretation. In that way, οὖν can decrease processing effort by telling the hearer that the upcoming assumption is already part of his store of contextual assumptions (cf. Hansen 1997: 168). As we have seen, mutual manifestness is a broad concept – assumptions which are inferable from previous assumptions, and assumptions which are highly likely (or even expected) to be true based on other assumptions, can be mutually manifest as well (cf. Bakker 2009 and §5.2.6).

This also opens the door for manipulative use of οὖν, as we have seen. If οὖν indicates that the upcoming assumption is mutually manifest, it is more likely to be subject to only ‘shallow processing’ by the audience, and will hence be accepted more easily. Οὖν can, then, be used to mark assumptions which may not be mutually manifest at all, but which the speaker presents as such to get the hearer to accept the upcoming assumption. In these conclusions, I’ll delve a little deeper into the manipulative potential of οὖν – this will set the table for a broader discussion of the manipulative potential of γάρ and οὖν in Part 3.

(67) Οὕτω γὰρ σχεδόν τι κατακλινεῖς «Ἐγὼ δὲ» ἔφη «τὸ γέρας τὸ προεμβατήριον τίνοσ ἐνεκεν οὐχὶ κομίζομαι;» «Ὅτι» ἔφη ὁ Τραχῖνος «οὐκ ἤτησας· ἀλλ’ οὐδὲ νέμησις οὐδέπω προὔτεθι τῶν εἰλημμένων.» Καὶ ὃς «Οὐκοῦν αἰτῶ τὴν κόρην τὴν αἰχμάλωτον.» Τοῦ Τραχίνου δὲ «Παρ’ αὐτὴν ὃ βούλει λάμβανε» εἰπόντος ὁ Πέλωρος ὑπολαβὼν «Καταλύεις οὖν τὸν ληστρικὸν νόμον ὃς τῷ πρώτῳ νηὸς ἐπιβάντι πολεμίας καὶ τὸν ὑπὲρ πάντων ἀγῶνα προκινδυνεύσαντι τοῦ κατὰ βούλησιν ἐκλογὴν ἀπένειμεν.» (Hel. Aeth. 5.31.3.1-10)

[Calasiris tells the story of how Trachinus wanted Chariclea to himself, and how Pelorus, Trachinus’ second-in-command, objected.] “[Pelorus] had not yet resumed his seat when he said, ‘And I, why do I not obtain the reward due to the man who led the boarding party?’ ‘Because,’ said Trachinus, ‘you have not asked for it. Besides, the time for distributing the booty has not yet been fixed.’ ‘Then I demand,’ he said, ‘the girl who has been taken prisoners.’ When Trachinus answered ‘Take everything you please except her’, Pelorus rejoined: ‘You are violating [oun] the pirates’ law which assigns to the first man who boards an enemy ship – to him who has been foremost in facing the danger of a combat fought for all the rest – the choice of whatever he desires.’”

Seeing as the situation here escalates to the point that Pelorus tries to convince the other pirates that they are being ‘cheated’ (στερηθήσεται) out of their ‘reward’ (τοῦ γέρωσ), it is fair to assume that the dispute between Trachinus and Pelorus here is being played out in front of an audience consisting of the other pirates on the ship. As such, the inference which Pelorus marks with οὖν (Trachinus doesn’t want to give up the girl; it is the pirate code that whoever braves the greatest danger on a ship gets his pick of

the loot; Pelorus was the man who braved the greatest danger on boarding Theagenes' and Chariclea's ship; Pelorus doesn't get Chariclea; so Trachinus is violating the pirate code) is addressed not just to Trachinus, but to all the pirates on the ship – as such, he is trying to persuade them that Trachinus is not being fair. It is Trachinus' reaction to Pelorus' οὖν utterance which is most interesting, however:

(68) «Οὐ τοῦτον» εἶπεν ὁ Τραχῖνος, «ὧ βέλτιστε, καταλύω ἀλλ' ἑτέρῳ νόμῳ δισχυρίζομαι, τοὺς ὑπηκόους εἴκειν τοῖς ἄρχουσι κελεύοντι. (Hel. Aeth. 5.31.4.1-3)

“I am not violating that [law],” said Trachinus, ‘my good man; but I rely on another law, which requires subordinates to give way to their leaders.’”

Trachinus is challenging Pelorus' claim, indicating that there is another law ('subordinates should always listen to their leaders') which supersedes the pirate code. Put differently, he is challenging the mutual manifestness of the preceding utterance – οὐ τοῦτον [...] καταλύω ('I did not violate it') makes this clear. Pelorus attempts to manipulate his fellow pirates into accepting his point of view by marking his conclusion ('Trachinus is violating the pirate code') with οὖν, but the assumption made manifest by Trachinus ('I rely on another rule' or ἑτέρῳ νόμῳ δισχυρίζομαι – the implicature being that this law overrules the one Pelorus makes reference to) aims to cancel that conclusion – and, hence, its mutual manifestness. In sum, οὖν often marks inferential conclusions as being mutually manifest. These conclusions may seem to be straightforward – and this is what the speaker banks on –, but they can be challenged all the same.

In other cases, 'manipulation' need not be taken negatively – the speaker can use οὖν to re-establish certain assumptions after a digression, and in doing so set the table for the next part of the narrative (e.g. (28)) or the argumentation (e.g. (27)). In these examples, the manipulation is not meant to benefit the speaker but to help the audience access assumptions which the speaker assumes may not be readily available anymore, or which she repeats to make sure that the following utterances will be understood as she intends them to. These types of utterances may refer back to preceding assumptions not by repeating them, but by presenting contextual assumptions straightforwardly associated with these preceding assumptions:

(69) Δωρεᾶς βασιλικῆς ἦν ἡμέρα, εἴτ' οὖν ἐτήσιος, εἴτε τηνικαῦτα τῷ βασιλεῖ σχεδιασθεῖσα διὰ τὴν κακουργίαν, καὶ παρεῖναι τὸ στρατιωτικὸν ἔδει τιμηθησομένους, ὥς ἕκαστος ἀξίας εἶχεν ἢ τάξεως. Πάλιν ἡ τῆς ἀνελευθερίας σκηνή· πάλιν τὸ δράμα τῆς ἀσεβείας φαρμαχθῆναι φιланθρωπία τινὶ τὸ ἀπάνθρωπον, καὶ χρήμασι δελεασθῆναι στρατιωτικὴν ἀλογίαν σὺν ἀπληστίᾳ, μεθ' ὧν τὰ πολλὰ βιοτεύουσιν. Ὁ μὲν οὖν προῦκάθητο, λαμπρῶς πανηγυρίζων κατὰ τῆς εὐσεβείας, καὶ μέγα φρονῶν τοῖς τεχνάσμασι [...]. (Greg. Iul. I.608.42-I.609.3)

[Gregory is discussing a particularly egregious example of Julian's impiety.] "It was the day of an imperial distribution of gifts (either the annual one or extemporized by the emperor at the moment out of malice), when the soldiery were ordered to attend to be rewarded according to the merit, or to the rank of each. Again the scene of servility; again, the drama of impiety! In order that his cruelty might be painted over with a certain show of benevolence, and the soldiers' inconsiderateness and greediness (in which they generally live) might be caught by the bait of money! He [*oun*] sat in state, splendidly holding festival against piety, and thinking well of himself because of his tricks; [...]."

Gregory begins his story by setting the scene – he's talking about a day on which the emperor doled out gifts (δωρεᾶς βασιλικῆς ἥν ἡμέρα) and the soldiers were rewarded according to their merit (τὸ στρατιωτικὸν [...] τιμηθησομένους). He then proceeds to interrupt his own story with his outcry against Julian's villainous plan to draw the soldiery into his impious endeavors by offering them gifts – knowing that their 'inconsiderateness with greediness' (ἀλογίαν σὺν ἀπληστίᾳ) led them to join him. This intermezzo is followed by the οὖν utterance, which marks the continuation of Gregory's story – Julian 'sat in state' (προὔκαθηντο), and 'prided himself on his tricks' (μέγα φρονῶν τοῖς τεχνάσμασι). This information has not been divulged before. However, since Gregory has already mentioned that it's the day of imperial gifts, he assumes that ὁ προὔκαθηντο will be mutually manifest – he assumes that his mention of the day of imperial gifts will activate certain assumptions associated with such a day, one of which will be the assumptions that the emperor 'sits in state' at such events. In that sense, the assumption marked by οὖν can only be presented as being mutually manifest because Gregory assumes that the underlying 'bridging' implicature is mutually manifest. Recall that bridging implicatures refer to assumptions which are needed to 'bridge the gap' in identifying a referent which has not been explicitly mentioned (§2.3.1.2, example (28)). Although there is no referent to be pinned down in (69), the process is similar – a contextual assumption has to be brought to bear on the interpretation process in order to identify the οὖν assumption as being mutually manifest. The assumption in οὖν (that Julian sat in state) is only mutually manifest because Gregory has set the scene – he's telling a story about the day of imperial gifts. As such, the οὖν assumption depends on another assumption being mutually manifest – namely, that emperors sit in state at days of imperial gifts. Put differently, the οὖν utterance should be understood as 'Julian sat in state [at the day of imperial gifts]'. Gregory can only assume that the οὖν

utterance is mutually manifest if the ‘bridging’ implicature⁸⁴ is mutually manifest as well. In that sense, ὁ προῦκάθητο amounts to mutually manifest information – the speaker assumes that it will be mutually manifest to the hearer as a direct result of an assumption communicated in the preceding utterance. As a side effect, the οὖν utterance marks a transition to a ‘more relevant step’ – i.e., the end of the short digression on soldiers’ inconsiderateness and rashness –, but οὖν encodes the information that the upcoming utterance will be mutually manifest.

A final point concerns the distinction between δέ and οὖν. It may seem as if their functions might overlap, on my account – οὖν points to mutual manifestness, while δέ points to at least some contextual continuity with the preceding utterance(s). Indeed, δέ and οὖν may appear together, as we have already seen (see e.g. (13) and (33)-(36) *supra*) – this might raise questions about the division of labor between the two:

(70) ὀλίγον ὕστερον εὐνοῦχοι παρῆσαν λείψανα μὲν δῆθεν τῆς σατραπικῆς τραπέζης ἐπὶ χρυσῶν τῶν σκευῶν κομίζοντες πᾶσαν δὲ πολυτέλειαν καὶ χλιδὴν ὑπεραίροντα καὶ «Τούτοις» εἰπόντες «ἡ δέσποινα δεξιούται καὶ τιμᾷ τὸ παρὸν τοὺς ξένους» καὶ παραθέμενοι τοῖς νέοις παραχρῆμα ἀπεχώρουν. Οἱ δὲ ἅμα μὲν τῆς Κυβέλης προτρεπούσης ἅμα δὲ προορῶντες μὴ δοκεῖν ἐνυβρίζειν τὴν δεξίωσιν ἀπεγεύοντο πρὸς βραχὺ τῶν παρακειμένων· καὶ τοῦτο καὶ εἰς ἐσπέραν ἐγένετο καὶ κατὰ τὰς ἄλλας λοιπὸν ἡμέρας. Τῇ δ’ οὖν ἑξῆς κατὰ πρώτην που τῆς ἡμέρας ὥραν οἱ συνήθεις εὐνοῦχοι παρόντες ὡς τὸν Θεαγένην «Μετακέκλησαι, ὦ μακάριε, πρὸς τῆς δεσποίνης» ἔλεγον «καὶ ὀφθῆναί σε προστετάγμεθα. (Hel. Aeth. 7.18.1.3-7.18.2.9)

[Theagenes and Chariclea are distraught by the death of Calasiris. Cybele tries to convince Theagenes to go and see Arsace:] “Shortly after, eunuchs appeared bearing on golden dishes what might seem to be remnants from the satrap’s table, but in fact were dainties of surpassing costliness and refinement. ‘These dishes,’ they said, ‘Her Highness sends to welcome and honor her guests on this occasion.’ They set down the dishes before the young pair and immediately withdrew. Moved not only by the urgings of Cybele but equally by a prudent desire not to appear to flout this courtesy, they tasted a little of the fare set before them. The same thing occurred also in the evening and on each following day. On the morrow [*de oun*], in the first hour or so of the day, the customary eunuchs stood before Theagenes and said: ‘You have been summoned, most fortunate sir, by our mistress, and we have received an order for your presentation.’”

⁸⁴ Again, this would not be a bridging implicature in the strict sense in which it is normally used to refer to reference assignment (see e.g. Matsui (2000) and Wilson & Matsui (2000/2012)), but the similarities are obvious.

In this example, there is both a transition (marked by $\delta\acute{\epsilon}$) and mutual manifestness (marked by $\omicron\tilde{\nu}$). While there is obvious contextual continuity (the eunuchs' habit is repeated on this specific day as well), there is also discontinuity – this day is different from the others in that the eunuchs do not bring food, but inform Theagenes of Arsace's summons. $\omicron\tilde{\nu}$'s presence is related to the contextual continuity. As evidenced by the use of $\sigma\upsilon\nu\eta\theta\epsilon\iota\varsigma$ ('customary'), this day at first seems like the others – it is only when the eunuchs start to speak (and through the addition of $\delta\acute{\epsilon}$) that the audience gets to know that this day will be different. In other words, $\omicron\tilde{\nu}$ marks the mutual manifestness of this utterance – that is, the fact that the eunuchs appear as they have done for the last few days, and as the narrator has made mutually manifest in the preceding utterances. As such, $\delta\acute{\epsilon}$ and $\omicron\tilde{\nu}$ operate on different parts of the interpretation process – whereas $\delta\acute{\epsilon}$ encodes information about the contextual assumptions needed to understand the upcoming, separate assumption in the speaker-intended way (i.e., functions as a constraint on the context), $\omicron\tilde{\nu}$ encodes information about the manifestness of the upcoming assumption (i.e., functions as a constraint on the higher-level explicature).

It is important to note that $\omicron\tilde{\nu}$ marks mutual manifestness, and only that. The context in which it appears may amount to a new step; it may be used manipulatively (in the pejorative sense, to get the audience to do your bidding or believe your claims); it may be used to mark a conclusion or a summary of the speaker's findings.⁸⁵ All of these interpretations arise from the text and the context together, in a broad sense – the semantics of the utterance, the implicatures generated by that utterance, the contextual assumptions used in deriving the interpretation, prosodic and gestural cues, and so on. They are not part of $\omicron\tilde{\nu}$'s semantics – although they have sometimes been treated as such. In the next and final chapter, I want to hammer home this observation, in line with Kroon (1995) and Black (2002), and argue that a stripped-down, deflationary account of these DMs is much more likely to get us close to an accurate analysis of their semantics. I will also, among other things, attempt to tie my observations throughout these different chapters together, and will contend that the three DMs which have been considered here all benefit from a relevance-theoretic approach. This approach has led to a fine-grained distinction between their functions – much more so than on existing coherence accounts, according to which they would all function on the 'presentational' level of discourse.

⁸⁵ For examples of the latter, see e.g. Bas. *Hex.* II.2.9 (in the protasis of a new utterance – that is, as the basis for the upcoming material implication in the apodosis); Greg. *Iul.* I.60.5; and Hel. *Aeth.* 2.30.1.1.

Part 3

Looking back – and ahead

General conclusions

We have come a long way from the view that DMs are “meaningless decorations or a verbal ‘crutch’ in discourse indicating a lack of speaker proficiency” (Aijmer 2002: 2). As I hope to have shown in this dissertation, however, there is still a lot of work to do for Ancient Greek DMs, which have been treated squarely against a coherence background, and as belonging to the domain of pragmatics. I have argued against both those assumptions – DMs can be approached more fruitfully as procedural items which are part of semantic competence. Existing scholarship has often treated *δέ*, *γάρ* and *οὖν* as applying to the presentational level of discourse – that is, the level at which discourse is organized into more and less important chunks, and relations between those different chunks hold. On the analysis presented here, however, all three operate on different parts of the interpretation process. Whereas *δέ* plays a role in separating assumptions from each other and, at the same time, ensures continuity of context, *γάρ* indicates that the upcoming assumption(s) will function as a contextual anchor for interpreting (usually) the preceding utterance. *Οὖν*, finally, indicates that the upcoming assumption is part of the interlocutors’ mutual cognitive environment. In other words, *δέ* indicates that a new interpretation process will start with the upcoming assumption, against the backdrop of the preceding context; *γάρ*, on the other hand, adjusts the interpretation process for another utterance, providing valuable context which will lead to the preceding utterance ‘clicking into place’, as it were – the preceding utterance will make more sense in light of the assumption(s) communicated in the *γάρ* utterance. *Οὖν* shortens the interpretation process as a whole by limiting the processing effort put in by the hearer – it indicates that the upcoming assumption is mutually manifest, and does not require the close attention a regular utterance would.¹

¹ Although *δέ*, *γάρ* and *οὖν* occur in different collocations and contexts across the different authors considered in this dissertation, this does not mean that there are differences between their meaning across these authors. Only in the *Hexaemeron*, for instance, does *γάρ* occur with Exemplifications (§4.2.3.3); Gregory, on the other hand, has a penchant for using *γάρ* with metadiscursive comments (§4.2.3.2); Heliodorus, finally, is the only

This distinction would explain why $\delta\acute{\epsilon}$ and $\omicron\tilde{\nu}$ can occur together frequently, why $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\nu}$ can appear together, and why $\delta\acute{\epsilon}$ and $\gamma\acute{\alpha}\rho$ do not. On a standard coherence approach, $\delta\acute{\epsilon}$ points to the start of a new discourse segment, whereas $\omicron\tilde{\nu}$ points to the start of a segment which is ‘more relevant’ than the preceding one – put differently, the presence of $\omicron\tilde{\nu}$ would obviate the need for the insertion of a $\delta\acute{\epsilon}$, as a ‘more relevant’ new segment is, by definition, also a new segment. On my analysis, $\delta\acute{\epsilon}$ indicates continuity-within-discontinuity, whereas $\omicron\tilde{\nu}$ points to mutual manifestness – an assumption can be separate from the preceding one while also being mutually manifest. Similarly, standard coherence approaches take $\gamma\acute{\alpha}\rho$ to indicate that a ‘less relevant’ discourse segment is coming, which would seem to preclude collocations with $\omicron\tilde{\nu}$. While Bakker (2009) has argued for a polysemous account on which $\omicron\tilde{\nu}$ takes on one function (or even meaning) when it occurs with $\gamma\acute{\alpha}\rho$, and one when it occurs on its own, my account is strictly unitary – an assumption can function as a contextual anchor ($\gamma\acute{\alpha}\rho$) while also being mutually manifest ($\omicron\tilde{\nu}$). Finally, a standard coherence approach – which assumes that $\delta\acute{\epsilon}$ and $\omicron\tilde{\nu}$ can occur together without any superfluous processing effort – would have to explain why $\delta\acute{\epsilon}$ and $\gamma\acute{\alpha}\rho$ do *not* occur together. If $\delta\acute{\epsilon}$ can appear with a DM which points to a ‘more relevant’ step, why doesn’t it appear with a DM which points to a ‘less relevant’ step? The answer is that $\delta\acute{\epsilon}$ ’s function lies in a different direction – $\gamma\acute{\alpha}\rho$ indicates that the upcoming assumption provides contextual anchoring for another utterance, whereas $\delta\acute{\epsilon}$ indicates that the upcoming assumption is, to a significant degree, separate from the preceding one. This does not seem to be a particularly fruitful combination, although there are examples from other parts of Ancient Greek literature.²

These DMs’ meaning is sufficiently broad as to defy the categorization account coherence theories offer on at least two counts. First, the same coherence relation can be marked by different DMs. For instance, the Reformulation coherence relation cross-cuts the different DMs – we have seen that both $\delta\acute{\epsilon}$ and $\gamma\acute{\alpha}\rho$ can be used in reformulative contexts; in fact, the ‘resumptive’ contexts in which $\omicron\tilde{\nu}$ occurs are at least partly reformulative as well. Reformulations, however, can have different purposes – when

one to use the $\omicron\mu\omega\varsigma$ δ' $\omicron\tilde{\nu}$ collocation in any order (§5.2.4.1). However, the meaning of the different DMs remains stable across these authors – their semantics enable them to occur across different contexts and with different lexical items, some of which may occur more frequently due to the nature of the text or the author’s preferences. $\omicron\tilde{\nu}$ occurs with reactions in the *Aethiopica* but not in the *Hexaemeron* (see §5.2.4.3), but this not due to the fact that Heliodorus’ $\omicron\tilde{\nu}$ is different from Basil’s; rather, it is simply due to the fact that reactions are more likely to occur in narrative than in argumentative texts.

² The combination does not occur in Classical literature; there are some instances in Post-Classical texts, but a search query on the *TLG* mostly turns up examples of $\omicron\tilde{\nu}$ $\delta\acute{\epsilon}$ $\gamma\acute{\alpha}\rho$ [...], where editorial practices have separated $\omicron\tilde{\nu}$ $\delta\acute{\epsilon}$, itself a collocation of $\omicron\tilde{\nu}$ $\delta\acute{\epsilon}$ which had long since been fused – and in which $\delta\acute{\epsilon}$ can no longer be considered to be a separate DM.

used with $\delta\acute{\epsilon}$, the speaker focuses more on the contextual continuity (while still indicating that the $\delta\acute{\epsilon}$ assumption is separate); with $\gamma\acute{\alpha}\rho$, the focus is more on how the $\gamma\acute{\alpha}\rho$ assumption can help interpret another one; and with $\omicron\tilde{\upsilon}\nu$, the focus is on the mutual manifestness of the assumption. The observation that these DMs can mark Reformulations, then, is not enough to distinguish them from each other – we need to look at the different ways in which the reformulations they mark, achieve relevance.

Second, the meaning of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ is also broad enough that they can occur across many different contexts, not all of which can be described in terms of coherence relations. I will return to this point at the end of this chapter. For now, it's important to underline that this also results in contexts where two DMs can occur together, or contexts which are highly similar but where different DMs can appear (for instance, $\delta\acute{\epsilon}$ one time, and $\omicron\tilde{\upsilon}\nu$ in another instance). There are some very subtle nuances at play here – not all of which are always equally accessible to non-native speakers –, which have, as far as I know, not yet been discussed systematically (with the exception of Bakker (2009)). In the chapter on $\omicron\tilde{\upsilon}\nu$, in particular, I have provided a first attempt at filling in these gaps, but more research is required here.

Not only would my account be in line with these observations about collocations and the overlap between the different DMs, it is also more in line with current models of evolutionary psychology. In the second chapter of this dissertation, I outlined the arguments against a coherence approach – one of them was that it is simply not a feasible model of how human communication works from an evolutionary point of view. Given that not every understandable utterance is coherent, coherence would, at best, be a byproduct of the interpretation process, and not a prerequisite for utterance understanding. If coherence is not necessary for utterance understanding, it would not make sense to look for it automatically in every case of ostensive-inferential communication – this would be a case of unnecessary processing effort, an inefficiency for which there is no discernible primer in the task environment (i.e., ostensive-inferential communication; cf. Simon 1997), and for which there is no clear path towards evolutionary benefit. If coherence is not looked for automatically, what would trigger the hearer's search for coherence? There has been no response to this question in existing coherence theories, as far as I know – and as long as there isn't, coherence theories cannot be taken to offer an evolutionarily realistic perspective on utterance interpretation.

The relevance-theoretic approach taken here takes questions of processing effort, task environment and evolutionary psychology in stride. I believe, and hope to have shown, that RT is in line with what we know about how communication works and how it evolved (chapter 2), and that an analysis of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\tilde{\upsilon}\nu$ (and DMs in general) can benefit from an RT approach (chapters 3 through 5). Coherence theories fall short on both counts. On the one hand, they are psychologically implausible; on the other, they are not equipped to deal with the problems DMs pose – they fail to provide an inclusive

approach which can deal with the variety of contexts in which DMs (and $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\breve{\nu}$ in particular) can occur, and their reliance on vague, ambiguous definitions (as we have seen for e.g. the Elaboration relation in chapter 4) necessarily leads to a less than complete appreciation and description of DMs' rich contributions to the process of utterance interpretation.

Ancient Greek linguists have been loath to apply non-functional or non-coherence-based approaches to DMs, as Bonifazi (2016) has argued:

“[C]lassicists have been extremely selective in borrowing from contemporary linguistics, with the effect that the majority of relevant publications apply only a very small number of methods, especially Functional (Discourse) Grammar and coherence approaches.”

This one-sided perspective has led to a skewed view of these DMs, on which they have been treated almost exclusively in operational terms – that is, in terms of what they do, not what they mean (cf. Schiffrin 1987: 31). There is nothing inherently wrong with this perspective – indeed, procedural rules are, by definition, operational as well. However, there *is* something wrong with the fact that the coherence-functional perspective seems to be the only one in town. Even scholars who argue against an exclusively coherence-based or functional approach (e.g. Black 2002 and Drummen 2015) can eventually fall into the coherence trap, painting the meaning of these DMs in terms which are heavily influenced by coherence assumptions – Black's analysis of $\gamma\acute{\alpha}\rho$ as basically pointing to subsidiarity and Drummen's analysis of $\omicron\breve{\nu}$ as basically pointing to conclusions are cases in point.

One of the consequences of these methodological blinders is that some fascinating aspects of these DMs' meaning have yet to be analyzed. As I've already alluded to in the chapter on $\omicron\breve{\nu}$, $\omicron\breve{\nu}$'s (and $\gamma\acute{\alpha}\rho$'s) meaning makes them prime candidates for use in manipulative contexts. Wilson (2011: 23), citing Sperber (2001b: 410), has pointed to the potential for manipulation with DMs:

“Displaying [logical/evidential relations] requires an argumentative form, the use of logical terms such as *if*, *and*, *or* and *unless*, and of words indicating inferential relationships such as *therefore*, *since*, *but*, and *nevertheless*. It is generally taken for granted that the logical and inferential vocabulary is – and presumably emerged as – a tool for reflection and reasoning. From an evolutionary point of view, this is not particularly plausible. The hypothesis that such terms emerged as tools for persuasion may be easier to defend.”

Extending Sperber's comments to include DMs which do not 'display' logical or evidential relations³ can lead to some interesting results (Wilson 2011: 23). As Wilson (ibid.) states, DMs can be used to bypass the hearer's epistemic vigilance mechanisms – a term I have mentioned before, but which I want to develop more fully here. My hope is that this preliminary exploration of aspects of Ancient Greek procedural meaning which constitute uncharted territory, will lead to further research – Wilson's (2011) quote above was, after all, a call to look at the manipulative potential of procedural items, not the conclusion of an analysis of existing scholarship.

The notion of epistemic vigilance starts from the distinction between understanding an utterance and accepting (or believing) it (Mazzarella 2015: 184). Epistemic vigilance is a cover term to refer to a suite of cognitive mechanisms in an "independent module" (Padilla Cruz 2012: 383) which evolved to filter out misinformation when transitioning from understanding to believing.⁴ As Sperber et al. (2010: 369) put it:

"Communication brings vital benefits, but carries a major risk for the audience of being accidentally or intentionally misinformed. Nor is there any failsafe way of calibrating one's trust in communicated information so as to weed out all and only the misinformation. Given that the stakes are so high, it is plausible that there has been ongoing selective pressure in favor of any available cost-effective means to least approximate such sorting."

The search for a relevant interpretation automatically gives rise to an epistemic vigilance check, where the hearer will make "inferences which may turn up inconsistencies or incoherences relevant to epistemic assessment" (Sperber et al. 2010: 375-6; Mazzarella 2015: 197). If you say, for example, that Caesar crossed the Rubicon in 100 BC, I understand what you're saying – but in the process of checking the communicated assumption against my store of encyclopaedic knowledge, I'll weigh, metarepresentationally, the communicated assumption against my previous belief that this happened after 100 BC (or that this happened in 49 BC, depending on how exact my knowledge of Roman history is) (cf. Sperber et al. 2010: 375-6). Now, I may trust the source of the communicated assumption enough that I will update my previous belief, and, from that point on, I'll believe that Caesar crossed the Rubicon in 100 BC. If my belief in my previous assumption is stronger than my trust in the source or the communicated assumption is, however, the communicated assumption will be filtered out via my epistemic vigilance mechanisms, and my store of encyclopaedic knowledge will not be revised (except, perhaps, in the sense that I'll now hold the assumption that

³ Although οὐκ can, as I've argued (§5.2.5), be considered contiguous to an evidential.

⁴ See the discussion and references in Sperber et al. (2010: 371-373; also Mazzarella (2015: 186) for more on the ontogeny of epistemic vigilance in children.

the speaker doesn't really know much about Caesar or Roman history – which may influence my reaction to her subsequent utterances, especially those about Caesar and/or Roman history).

The two most important mechanisms underlying epistemic vigilance are trust calibration and coherence checking (Mercier & Sperber 2011: 60). The former is speaker-based, while the latter is content-based. Trust calibration involves the hearer's estimation of the speaker's competence or benevolence – in my Rubicon example, the speaker may be notorious for her lack of knowledge about the Roman Republic. In that case, the hearer will take her claims with a grain of salt *a priori*, which means that the hearer has his doubts about the speaker's competence (see also Mazzarella (2015: 197) on this point). In the example above, the *result* of interpreting an utterance will be a downwards calibration of the hearer's trust level (if he has enough knowledge of Roman history to know that Caesar did not cross the Rubicon in 100 BC). Repeated lying may also lead the hearer to (re-)calibrate his trust in what the speaker says, and will lead to his epistemic vigilance mechanisms being on high alert. In that case, the speaker will be taken to be non-benevolent. For the purposes of this dissertation, Gregory or Basil's status as bishops and, hence, leaders of their respective communities, may already predispose their audience to believe what they say due to their audience's high level of trust in them (cf. Mercier & Sperber 2011: 58).

With coherence checking, on the other hand, the hearer tries to “integrate” the communicated assumption(s) with “previously held beliefs” (Mercier & Sperber 2011: 60). Trust calibration and coherence checking may interact and even come into conflict – as Mercier & Sperber (*ibid.*) note, information from a “highly trusted” source will probably be integrated much more easily into the hearer's store of encyclopaedic knowledge, even if it involves a dramatic revision of existing beliefs (i.e., fails a coherence check).

The speaker, of course, must assume that the hearer will check her claims against his store of encyclopaedic knowledge – that is, that he will be epistemically vigilant. As epistemic vigilance takes place during the interpretation process, the speaker's utterance will only be checked against contextual assumptions which are activated during that interpretation process (Sperber et al. 2010: 376). The speaker, however, may want the hearer to take into account assumptions which are less likely to enter into the equation – these assumptions will increase the chances of the hearer believing what she said, or of the speaker persuading the hearer to do or say what she wants him to say or do (*ibid.*). Conversely, the goal may be to block assumptions which would provide a counterweight to these assumptions from arising, or to replace certain assumptions – which would, in turn, lead to different inferences and conclusions (see Maillat & Oswald 2009: 363; Maillat 2013: 194). This is where manipulation comes in, and where γάρ may play an intriguing role. Consider the following example (see also (52)-(54) in §4.2.3.6):

(1) Τούτοις εἰρημένοις οὐ πᾶσιν ἡ Χαρίκλεια συνετίθετο, τὴν μὲν τύχην ἐν δίκη κακηγορεῖσθαι πρὸς αὐτοῦ φάσκουσα τὸ δὲ τοῖς πολεμίοις ἐκόντας ἑαυτοὺς ἐγχειρίζειν οὐκ ἐπαινοῦσα· μὴ γὰρ⁵ εἶναι πρόδηλον ὡς ἀναιρήσουσι λαβόντες (οὐ γὰρ οὕτω χρηστῷ τῷ δαίμονι προσπαλαίειν ὡς ταχεῖαν τῶν συμφορῶν ἀπαλλαγὴν συγχωρῆσαι). (Hel. Aeth. 5.7.1.1-6)

[Chariclea and Theagenes see yet another band of brigands coming for them. Theagenes is distraught, and suggests that they resign themselves to their fate.] “Chariclea did not agree with everything that he had said. His upbraiding of Fortune, she said, was just; but she did not approve of voluntarily yielding themselves up to the enemy, as there was no evidence to show that they would be put to death when taken (not [*gar*] was the divinity against whom they were contending so kind as to grant them a quick deliverance from their troubles).”

Prior to (1), Theagenes had communicated the assumption that they should give themselves up (τί οὖν οὐχ [...] τοῖς βουλομένοις ἀναιρεῖν ἐγχειρίζομεν, ‘Why then do we not [...] give ourselves up to those intent on destroying us?’). Chariclea disagrees, arguing that giving themselves up to the brigands might not result in their death – they may have other plans in store for them. With the γάρ utterance, she provides contextual anchoring for this assumption – the δαίμων (‘divinity’) who delights in seeing them suffer, might have their deaths play out longer than Theagenes expects. Against the background of the γάρ assumption, Chariclea’s conclusion that they should not give themselves up to the brigands, makes perfect sense – her goal with the γάρ utterance is to contradict and eliminate an assumption on Theagenes’ part (‘if we give ourselves up to the brigands, we will die quickly and stop our suffering’), and hence induce a different conclusion (‘we should not give ourselves up to the brigands’). Contradiction and elimination is one of the ways in which utterances can yield positive cognitive effects, and, in this case, it leads to additional positive cognitive effects further along the interpretive path – Chariclea hopes that her inference makes more sense than the one Theagenes has made, and that Theagenes’ check for coherence will have him accept her perspective on the matter of the brigands. This all starts, however, from the assumption communicated in the γάρ utterance, which, Chariclea assumes, will lead Theagenes to decide to flee – as he eventually does (Ποιῶμεν ὡς βούλει, ‘Let us do as you wish’, he says).

The next instance is manipulative in a different sense:

⁵ This γάρ utterance is again explanatory in the sense that it provides contextual assumptions which make the preceding utterance easier to believe – Chariclea believes the upcoming utterance provides support for her position that they should not just give up.

(2) Ὡστε ὦ Κυβέλη πάντα κίνει πᾶσαν εὔρισκε μηχανὴν πρὸς ὅξὺ καὶ τὴν ἄκραν ἀκμὴν περιεστηκότα ἡμῖν ὁρῶσα τὰ πράγματα, καὶ ἅμα ἐννοῦσα ὡς οὐκ ἔστι (πῶς γάρ;) ὅπως ἐμαυτῆς ἀπογνοῦσα φείσομαι ἄλλων, ἀλλὰ πρώτη παραπολαύσεις τῶν τοῦ παιδὸς ἐπιχειρημάτων, ἃ πῶς ἠγγνόησας οὐκ ἔχω συμβάλλειν.» (Hel. Aeth. 8.5.8.1-7)

[Arsace is worried about her increasing passion for Theagenes, and that Achaemenes will tell Oroondates about their affair-to-be.] “Go therefore, Cybele, leave no stone unturned and do it quickly. You see how things have turned out for me and have brought me to the very verge, and reflect at the same time that it is not possible (how [gar]?), if my case becomes desperate, to spare others, but that you will be the first to share the consequences of your son’s machinations, which, I cannot guess how, you have failed to detect.”

Arsace’s not-so-veiled threat is cleaved in two by the γάρ utterance. She states that it is not possible (οὐκ ἔστι) for her to save others if her affair with Theagenes peters out, and/or if Oroondates comes to know about her cheating ways – she may go down, but she’ll drag Cybele down with her. The γάρ utterance, for its part, connects a rhetorical question to οὐκ ἔστι – not only isn’t it possible for her to save others, but she asks how (πῶς) that could even be possible. In other words, she sees no possible way for her to save others if things go belly up, and the rhetorical question involves the hearer, asking her to (implicitly) confirm the proposition – in rhetorical questions, “the polarity of the answer is the opposite of the polarity of the corresponding question”, which means that Arsace expects Cybele to confirm that there is no way for her to save others (Gutiérrez Rexach 1998: 144). By anchoring the rhetorical question to the assertion via γάρ, Arsace challenges Cybele to find something wrong with that assertion. If she cannot, the communicated assumption will be that much stronger – Arsace puts part of the responsibility for accepting the assumption on Cybele’s shoulders (cf. Colston 2015: 79; Charteris-Black 2006: 12). By using a rhetorical question, Arsace wants Cybele to accept that there is no way for her to spare others (including Cybele) – the conclusion that Cybele’s death is unavoidable becomes that much stronger if Arsace acts as if she has thought about it; that she sees no way out; and that she asks her interlocutor to join her in her interpretation process – she invites Cybele to think of possible ways in which she could spare others, which, Arsace assumes, she won’t be able to. In that sense, the γάρ utterance is manipulative – Arsace knows that Cybele, her servant, cannot take on her question without being insubordinate; at the same time, acting as if she’s thought about other ways of solving her predicament and as if there’s another way out, forces Cybele to either keep her peace (*de facto* the only path available for a servant to her master) or to challenge Arsace’s conclusion. Γάρ’s role here lies, as always, in its anchoring function – if the indirect assertion behind the rhetorical question is accepted, the surrounding assumption becomes easier to accept. As such, the contextual assumption marked by γάρ strengthens another assumption (cf. also Black 2002: 262).

I'll give one other example of how γάρ utterances can be manipulative:

(3) Σὺ κατὰ τῆς μεγάλης τοῦ Χριστοῦ κληρονομίας; (ὁ τίς, καὶ πόσος, καὶ πόθεν;) τῆς μεγάλης καὶ οὐ παυσομένης, οὐδ' ἂν πλέον ἢ σὺ μανῶσί τινες, ἀλλ' ἐπὶ πλεῖον ἀεὶ βαδιουμένης τε καὶ ἀρθησομένης· πιστεύω γὰρ ταῖς προρρήσεσι καὶ τοῖς ὀρωμένοις. (Greg. *Iul.* I.588.40-589.2)

[Gregory is in the middle of one of his trademark rants against Julian.] “Did you do this against the great heritage of Christ – and who were you, and how great, and whence? –, against the great heritage, and the one which will never cease (even though some may rage against it, even more than you have done), but which will always advance and be exalted. I believe [*gar*] the prophecies and the things seen.”

This example is all about Gregory guilting his audience into accepting the assumption preceding the γάρ utterance. By way of γάρ, he indicates that the upcoming utterance will provide contextual assumptions which will help the audience understand or, in this case, believe the preceding utterance. As the γάρ assumption is basic to being a Christian, the audience has no choice but to accept it – and since γάρ indicates that the upcoming assumption is relevant for the interpretation of the preceding utterance, the audience will be more likely to accept the preceding assumption as well. Gregory manages to paint Julian here as a mere mortal fighting against the inexorable power of God – and via the γάρ utterance, he reminds his audience that both he and his audience believe in this power. As a result, the battle lines between Gregory and his audience on the one hand, and Julian on the other, will be drawn more sharply, and his congregation's anger towards Julian will only grow. Gregory's goal is to paint Julian as being far removed from what it is to be a Christian, and passages like this subtly manage to reinforce that perspective.

I've already discussed the manipulative potential of οὖν in §5.2.5. I'll provide two more examples, just to drive home the point that it can be used to manipulate the hearer into accepting the communicated assumptions:

(4) Μῦθοί τινες καταγέλαστοι ὑπὸ γραῖδίων κωθωνιζομένων παραληρούμενοι πανταχοῦ διεδόθησαν, ὅτι μαγγανείαις τισὶ τῆς οἰκείας ἔδρας ἀποκινηθεῖσα σελήνη πρὸς γῆν καταφέρεται. Πῶς μὲν οὖν κινήσει γοήτων ἐπαιδιή, ἣν αὐτὸς ἐθεμελίωσεν ὁ Ὑψιστος; (Bas. *Hex.* VI.11.29-33)

[Basil is discussing the awesomeness of the moon and the sun.] “Everywhere ridiculous old wives' tales, imagined in the delirium of drunkenness, have been circulated – that enchantments can remove the moon from its place and make it descend to the earth. How [*oun*] could a magician's charm shake that of which the Most High himself has laid the foundations?”

Basil marks his question with οὐν, indicating that the assertion lying behind this rhetorical question (that is, negative polarity – a ‘magician’s charm’ cannot shake it) is mutually manifest. However, this assertion depends on other assumptions, which are not made explicit but which, Basil assumes, are mutually manifest as well. One of these is the assumption that magicians are less powerful than God, which any self-respecting Christian will agree with. However, this assumption may not be shared by magicians, or by those who believe in magicians – they may believe that they are in direct contact with a god (or various gods), and that they can ask or command these gods to do their bidding. While Basil will have no trouble convincing his congregation of the underlying assumption – indeed, the very idea that magicians have power which might rival that of God will have seemed ridiculous to those present –, the general point here is that οὐν can be used to present assumptions as being mutually manifest while relying on assumptions which might not be so obvious to those who are more critical of the assumptions in the speaker’s cognitive environment. If the speaker is a trusted source, however, and if he is talking to a hearer whose cognitive environment largely overlaps with his own, inferences and conclusions will be accepted more easily, the mutual cognitive environment will expand, and the speaker will be able to influence how the hearer thinks about the world. This is how assumptions spread across populations – if your peers believe X, and a trusted source indicates that he believes X, your epistemic vigilance mechanisms will be more inclined to let X pass (cf. Sperber et al. 2010: 380).

(5) Ὑπαγόμενος οὐν αὐτὸν ὥστε πᾶν ἀναπτύξαι τὸ βούλευμα «Τί οὐν» ἔφην «δεῖ σε συμπλέκεσθαι τοῖς Φοῖνιξιν ἀλλὰ μὴ ἀναιμωτὶ καὶ πρὸ τῆς θαλάττης ἔχειν, ἐκ τῆς οἰκίας ἀρπάσαντα τῆς ἐμῆς;» (Hel. Aeth. 5.20.7.1-4)

[Tyrrhenus is informing Calasiris of Trachinus’ plan to abduct Chariclea from the Phoenician ship on which they’re planning to leave. He is recounting his conversation with the pirate, where he asked Tyrrhenus if ‘the girl’ (i.e., Chariclea) will leave with the Phoenicians, because he is madly in love with her.] “When I had led him on so that I might induce him to reveal the whole of his design, I said: ‘Why [*oun*] should you get yourself embroiled with the Phoenicians, instead of – without bloodshed and before she goes to sea –, you could have her by abducting her from my house?’”

There is some pretty high-level mindreading going on here. Trachinus has just probed Tyrrhenus for information about the Phoenicians’ time of departure, and about whether the ‘girl’ (Chariclea) would leave with them. He has also informed Tyrrhenus of his love for Chariclea. Armed with the additional assumption that Trachinus is a pirate captain, Tyrrhenus, in (5), indicates that he has derived the implicit premise behind Trachinus’ questions – he wants to ambush the Phoenician ship and abduct Chariclea. As Tyrrhenus wants to protect Chariclea and her companions, he tries to convince Trachinus to abduct her from his own house – presumably so that he could set a trap for

Trachinus himself. He marks his rhetorical question with οὖν, indicating that the underlying assumption ('it is not necessary to become embroiled with the Phoenicians') is mutually manifest based on the premise that Trachinus can abduct Chariclea from Tyrrhenus' house. The goal here is to change Trachinus' mind – to have him put aside his plan to ambush the Phoenician ship. Tyrrhenus tries to achieve this goal mainly by way of his arguments – the implicature is that it is less of a hassle to abduct Chariclea here and now than to wait until the Phoenicians set out and fight them (ἀναιμωτὶ καὶ πρὸ τῆς θαλάττης). Based on the assumptions which Trachinus had communicated previously and those which were already manifest to Tyrrhenus, along with the implication⁶ that Trachinus wants to abduct Chariclea, Tyrrhenus also uses οὖν to indicate that his conclusion is mutually manifest – that, given the assumptions in the mutual cognitive environment, Tyrrhenus' conclusion (i.e., it's better not to get embroiled with the Phoenicians and abduct Chariclea now) falls out naturally. Trachinus is not convinced in what follows, stating that this is against the pirates' code and that he is also interested in the ship's booty (and hence signaling that Tyrrhenus' premises and conclusion have not become part of the mutual cognitive environment), but this has no bearing on οὖν's role here. It is used in an utterance which clearly attempts to persuade the hearer to change his mind – in fact, Tyrrhenus inserts it to help in this attempt by indicating that the underlying assumption ('it is not necessary to become embroiled with the Phoenicians') is mutually manifest based on what he hopes is the mutual cognitive environment.

Of course, many instances of γάρ and οὖν (and δέ') are not 'manipulative' in the sense that they attempt to get the hearer to agree on some assumption. Yet all of these DMs

⁶ This is not necessarily an implicature – if Trachinus wanted to ask his questions without making manifest that he is planning to abduct Chariclea, Tyrrhenus would have derived the implicit premise behind Trachinus' questions independently of Trachinus' communicative intention.

⁷ Although it was difficult to find instances of manipulative use of δέ, the following example is interesting:

“Ὡστε ἔνεστί σοι πειθομένη δρασμόν τε τὸν ἐνθένδε σὺν ἡμῖν αἰρουμένη, πρὶν τι καὶ πρὸς βίαν σε τῶν παρὰ γνῶμην ὑποστῆναι, τοῦ Χαρικλέους ἤδη σοι τὸν Ἀλκαμένους γάμον ἐσπουδακότος, γένος μὲν καὶ πατρίδα καὶ τοὺς φύντας κομίζεσθαι Θεαγένει δὲ ἀνδρὶ συνεῖναι γῆς ὅποι καὶ βουλόμεθα συνέπεσθαι παρεσκευασμένῳ [...]. (Hel. Aeth. 4.13.2.1-7)

[Charicles is planning to marry Chariclea off to Alcamenes. Calasiris offers her a way out, stating that he is acquainted with her real mother Persinna.] “‘So it is possible for you, if you will be persuaded and decide to join us in our flight from here before you are forced to submit to some arrangement contrary to your choice – for Charicles even now is busied with your marriage to Alcamenes –, to regain your kinsfolk [*men*] and your native land and your parents, and to be united with Theagenes [*de*], who is prepared to accompany us wherever we may go; [...].”

are ‘manipulative’ in the sense that they guide the hearer along a distinct interpretive path. The main takeaway from the pages I have devoted to these little words, however, is that they are inherently ‘messy’. I used this label to refer to γάρ’s meaning in particular, but it applies to δέ and οὖν as well – these items’ broad-brush functions explain their proclivity for appearing in a variety of contexts on the one hand; on the other, they limit the applicability of category-based accounts such as coherence theories. As we have seen, δέ, γάρ and οὖν have been analyzed mostly from a polysemous or polyfunctional perspective, which is usually tied up with a taxonomic analysis under which the focus is more on the contexts in which the different DMs appear instead of the semantic contribution of the DMs themselves. The advantage of a polyfunctional/taxonomic approach is, naturally, that a more refined view of its different aspects can be assembled; the disadvantage is, as stated, that a conflation of the items’ semantics and the contexts in which they appear, is in the cards – what Schourup (1999: 250) terms ‘contamination’. The presumed advantage of a polyfunctional/taxonomic approach, however, has not been borne out here. We have seen that a polyfunctional account (such as the ‘elaboration’ one for γάρ in chapter 4) does not, in fact, necessarily lead to a ‘more refined’ view – it was not equipped to deal with those contexts which cannot be forced into a coherence straitjacket. The shell contexts in which γάρ occurs are one example – there is no coherence concept to designate this type of relation, to my knowledge. The same can be said for εἴτ’ οὖν examples, which cannot be regarded as a return to a higher level of the discourse hierarchy – and for examples where δέ introduces reformulations, which are not simply ‘discontinuous’ or a ‘new discourse segment’. I have tended to focus on examples which do not fit the ‘δέ = discontinuity’, ‘γάρ = subsidiary’ and ‘οὖν = more relevant’ mould in order to demonstrate that these items’ core meaning is far more subtle than these simple categorizations imply, and that their function applies to a rich variety of contexts and assumptions.

As always, μέν points forward and δέ (to some degree) backwards, both indicating that there is another assumption for which the upcoming utterance is relevant. In this case, Calasiris uses these DMs to increase his chances of convincing Chariclea to join him. He knows that the assumption marked by μέν will not be enough – without Theagenes, the prospect of joining her family won’t seem that appealing. However, the δέ assumption does not make much sense without the μέν assumption – if at all possible, Chariclea will want to avoid the hassle of going all the way to Ethiopia if she can be with Theagenes somewhere closer by. Taken together, however, both options become more appealing, and strengthen each other: Chariclea can not only be with her family – she can do so with Theagenes; Chariclea can not only be with Theagenes – she can do so in her homeland. In turn, the conclusion (‘I will go with Calasiris’) is strengthened. In that sense, μέν and δέ are used manipulatively here – the two assumptions should be interpreted together, which strengthens both arguments and the resulting conclusion. Again, clear examples of ‘manipulative’ δέ are fewer in number than those of ‘manipulative’ γάρ and (especially) οὖν, but the potential does seem to be present.

Even if we accept coherence theories' assumptions, however, their reliance on categorization – these discourse segments are related via the Explanation relation, these via the Contrast relation, and so on – is at odds with the fluidity between the different relations. Many of the contexts in which $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ occur, cannot be painted in discrete terms – $\gamma\acute{\alpha}\rho$, for instance, occurs with Exemplifications, which can also be regarded as Explanations or Elaborations. The connections between these different relations are often left unstated, a problem exacerbated by the lack of consensus on which coherence relations actually exist – as well as the general lack of definitional and terminological rigor which I already alluded to at the beginning of this chapter. In addition, these relations can achieve relevance in different ways – the comparisons with which $\gamma\acute{\alpha}\rho$ occurs, for instance (§4.2.3.6), produce different positive cognitive effects than the 'simple' reformulations which $\gamma\acute{\alpha}\rho$ can mark as well (§4.2.3.4). Coherence theories' drive for categorization tends to level off these differences, focusing heavily on the elements which make different utterances similar.

My approach, inspired by relevance theory – that is, a cognitive processing pragmatics –, simultaneously takes a razor and a scalpel to $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$'s semantics. The razor is Occam's – I have tried to trim the fat from existing accounts of these items, isolating their semantics from their contexts as much as possible and really getting to the heart of what these items contribute to the discourse. This stripped-down approach to semantics flows from Grice's Modified Occam's Razor, which states 'Do not multiply senses beyond necessity'. The scalpel is more precise – my intention was to build on existing analyses of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$, not to replace them. I am very much aware that earlier approaches to their semantics have much to offer, and that these scholars' intuitions and observations have been a valuable stepping stone on the way to my own analysis. In this sense, the approach I have taken here is more surgical. Yet I hope it is more surgical in a different sense as well. My aim was to look extensively at the contexts in which $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ occur in a more qualitative than quantitative sense, and to give a detailed picture of the parallels between these contexts. As such, the approach was more bottom-up than top-down – there was no predetermined framework in which these items had to fit. Put differently, the starting point was not 'these items must point to coherence in some way', but, more generally, 'these items have to help the hearer interpret the discourse quickly and easily in some way'. Although this approach also relies on some preliminary assumptions, of course – most of them relevance-theoretic –, I have argued that these are much more acceptable – psychologically, evolutionarily, conceptually – than the ones underlying coherence theories are.

The optimal outcome for this dissertation is that it jump-starts a discussion of the relevance-theoretic model's applicability to Ancient Greek DMs in general, and of my analyses of $\delta\acute{\epsilon}$, $\gamma\acute{\alpha}\rho$ and $\omicron\upsilon\breve{\nu}$ in particular. My account represents a challenge to current approaches to Ancient Greek DM research – coherence theories sit comfortably perched atop this subfield, and the result has been a perspective which has become all too staid.

Relevance theory offers a way forward. My account is more inclusive – taking more, different and difficult examples of δέ, γάρ and οὖν into account –, and approaches these items from a cognitive instead of a coherence point of view. My hope here is not that my approach will supplant what others have done (or will do), but that it will lead to a refinement of our current view on these items. This, in turn, will help our understanding of what these DMs do, and will help us work towards an account which is more in line with the data – that is, both the contexts in which these DMs occur, and what we know about evolutionary psychology and the human brain. This account is not perfect – but it is, hopefully, another step in that direction.

Bibliography

- Aijmer, Karin. 2002. *English discourse particles: evidence from a corpus: Studies in corpus linguistics*. Amsterdam/Philadelphia: John Benjamins.
- Aijmer, Karin. 2007. The meaning and functions of the Swedish discourse marker *alltså* – Evidence from translation corpora. *Catalan Journal of Linguistics* 6:31-59.
- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Allan, Rutger J. 2009. Towards a Typology of the Narrative Modes in Ancient Greek. Text Types and Narrative Structure in Euripidean Messenger Speeches. In Bakker & Wakker (eds.), pp. 171-203.
- Allan, Rutger J. 2015. Classifying Greek Particles. A Functional Discourse Grammar Approach. Paper presented at the *International Colloquium on Ancient Greek Linguistics* (Rome).
- Allott, Nicholas. 2008. *Pragmatics and Rationality*. London: UCL. [doctoral dissertation]
- Allott, Nicholas. 2010. *Key Terms in Pragmatics*. London: Continuum.
- Allott, Nicholas. 2013. Relevance theory. In Capone et al. (eds.), pp. 55-98.
- Andersen, Gisle, and Fretheim, Thorstein (eds.). 2000. *Pragmatic Markers and Propositional Attitude*. Amsterdam/Philadelphia: John Benjamins.
- Anderson, John R. 1983. A Spreading Activation Theory of Memory. *Journal of Verbal Learning and Verbal Behavior* 22:261-295.
- Apperly, Ian. 2011. *Mindreaders : the cognitive basis of "theory of mind"*. Hove East Sussex ; New York: Psychology Press.
- Ariel, Mira. 1988. Retrieving propositions from context: why and how. *Journal of Pragmatics* 12:567-600.
- Ariel, Mira. 1990. *Accessing noun-phrase antecedents*. London: Routledge.
- Assimakopoulos, Stavros. 2003. Context selection and relevance. Paper presented at the *Theoretical & Applied Linguistics Postgraduate Conference* (Edinburgh).
- Azuelos-Atias, Sol. 2016. Identifying the meanings hidden in legal texts: The three conditions of relevance theory and their sufficiency. *Semiotica* 209:99-123.
- Bach, Kent. 1999. *The Myth of Conventional Implicature*. *Linguistics and Philosophy* 22:327-366.
- Bach, Kent. 2004. Pragmatics and the Philosophy of Language. In Horn & Ward (eds.), pp. 463-487.
- Bakker, Egbert J. 1990. Homeric Discourse and Enjambement: A Cognitive Approach. *Transactions of the American Philological Association* 120:1-21.
- Bakker, Egbert J. 1993. Boundaries, Topics, and the Structure of Discourse: An Investigation of the Ancient Greek Particle DÉ. *Studies in Language* 17:275-311.
- Bakker, Egbert J. 1997. *Poetry in Speech: Orality and Homeric Discourse*. Ithaca: Cornell University Press.

- Bakker, Stéphanie J. 2009. On the Curious Combination of the Particles γάρ and οὐν. In Bakker & Wakker (eds.), pp. 41-61.
- Bakker, Stéphanie J., and Wakker, G. C (eds.). 2009. *Discourse Cohesion in Ancient Greek*. Leiden: Brill.
- Bar-Aba, Esther B. 2003. Punctuation marks: procedural and conceptual uses. *Journal of Pragmatics* 35:1031-1048.
- Baratin, Marc. 1989. *La naissance de la syntaxe à Rome: Propositions*. Paris: Editions de Minuit.
- Bar-Hillel, Yehoshua. 1971. Out of the Pragmatic Wastebasket. *Linguistic Inquiry* 2:401-407.
- Barrett, H. Clark. 2005. Enzymatic Computation and Cognitive Modularity. *Mind & Language* 20:259-287.
- Barrett, H. Clark. 2006. Modularity and Design Reincarnation. In Carruthers et al. (eds.), pp. 199-217.
- Barrett, H. Clark, and Kurzban, R. 2006. Modularity in cognition: Framing the debate. *Psychological Review* 113:628-647.
- Bartelink, Gerhardus J. M. 1986. *Het vroege christendom en de antieke cultuur*. Muiderberg: Coutinho.
- Basnakova, Jana, Weber, Kirsten, Petersson, Karl M., van Berkum, Jos, and Hagoort, Peter. 2014. Beyond the Language Given: The Neural Correlates of Inferring Speaker Meaning. *Cerebral Cortex* 24:2572-2578.
- Bäumlein, Wilhelm von. 1861. *Untersuchungen über griechische Partikeln*. Stuttgart: Metzler.
- Bazzanella, Carla. 2006. Discourse markers in Italian: towards a “compositional” meaning. In Fischer (ed.), pp. 449-464.
- Bazzanella, Carla, and Bosco, Cristina, and Garcea, Alessandro, and Gili Fivela, Barbara, and Miecznikowski, Johanna, and Tini Brunozzi, Francesca. Italian *allora*, French *alors*: Functions, convergences and divergences. *Catalan Journal of Linguistics* 6:9-30.
- Bennekom, Riek van. 1975. The Definitions of ΣΥΝΔΕΣΜΟΣ and ΑΠΘΡΟΝ in Aristotle, *Poetics* Ch. 20. *Mnemosyne* 28:399-411.
- Bentein, Klaas. 2016. ἔγραψέ μοι γάρ ... τὰ νῦν οὖν γράφω σοι. Οὖν and γάρ as inferential and elaborative discourse markers in Greek papyrus letters (I – IV AD). *Revue Belge de Philologie et d'Histoire* 94:67-104.
- Berkum, Jos J.A. van. 2008. Understanding Sentences in Context: What Brain Waves Can Tell Us. *Current Directions in Psychological Science* 17:376-380.
- Berkum, Jos J.A. van. 2010. The brain is a prediction machine that cares about good and bad – Any implications for neuropragmatics? *Italian Journal of Linguistics* 22:181-208.
- Bernardi, Jean. 1961. ‘La date de l’Hexaéméron de saint Basile’. In *Studia Patristica*, vol. 3, ed. by Cross, Frank Leslie, pp. 165-169, Berlin: Akademie-Verlag.
- Bezuidenhout, Anne. 2004. Procedural Meaning and the Semantics/Pragmatics Interface. In *The Semantics/Pragmatics Distinction*, ed. by Bianchi, Claudia (ed.), 101-131, Stanford: CSLI Publications.
- Bezuidenhout, Anne, and Cutting, J. C. 2002. Literal meaning, minimal propositions, and pragmatic processing. *Journal of Pragmatics* 34:433-456.
- Black, Stephanie L. 2002. *Sentence Conjunctions in the Gospel of Matthew: καί, δέ, τότε, γάρ, οὐν and Asyndeton in Narrative Discourse*. Sheffield: Sheffield Academic Press.
- Blakemore, Diane. 1987. *Semantic constraints on relevance*. Oxford: Blackwell.
- Blakemore, Diane. 1988. The organization of discourse. In *Linguistics: The Cambridge Survey IV. Language: The Socio-cultural Context*, ed. by Newmeyer, Frederick J. (ed.), 229-250, Cambridge: Cambridge University Press.
- Blakemore, Diane. 1989. Denial and Contrast, a Relevance Theoretic Analysis of But. *Linguistics and Philosophy* 12:15-37.

- Blakemore, Diane. 1991. Performatives and Parentheticals. *Proceedings of the Aristotelian Society* 91:197-213.
- Blakemore, Diane. 1992. *Understanding utterances: Blackwell textbooks in linguistics*. Oxford: Blackwell.
- Blakemore, Diane. 1993. The relevance of reformulations. *Language and Literature* 2:101-120.
- Blakemore, Diane. 1996. Are apposition markers discourse markers?. *Journal of Linguistics* 32:325-347.
- Blakemore, Diane. 1998. The context for so-called 'discourse markers'. In *Context in Language Understanding and Language Learning*, ed. by Williams, John and Malmkjaer, Kirsten, 44-60, Cambridge: Cambridge University Press.
- Blakemore, Diane. 2001a. Discourse and Relevance Theory. In *The Handbook of Discourse Analysis*, ed. by Schiffrin, Deborah & Tannen, Deborah, and Hamilton, Heidi E. (eds.), 100-118, Oxford: Blackwell.
- Blakemore, Diane. 2001b. Re-visiting procedural meaning: 'but', 'however' & 'nevertheless'. Paper presented at the *Georgetown University Round Table* (Washington, D.C.).
- Blakemore, Diane. 2002. *Relevance and linguistic meaning: the semantics and pragmatics of discourse markers*. Cambridge: Cambridge University Press.
- Blakemore, Diane. 2004. Discourse Markers. In Horn & Ward (eds.), pp. 221-240.
- Blakemore, Diane. 2007. Or'-parentheticals, 'that is'-parentheticals and the pragmatics of reformulation. *Journal of Linguistics* 43:311-339.
- Blakemore, Diane, and Carston, Robyn. 1999. The pragmatics of *and*-conjunctions: the non-narrative cases. *University College London Working Papers in Linguistics* 11:1-20.
- Blakemore, Diane, and Carston, Robyn. 2005. The pragmatics of sentential coordination with *and*. *Lingua* 115:569-589.
- Blass, Regina. 1989. Grammaticalisation of interpretive use: the case of *re* in Sissala. *Lingua* 79:299-326.
- Blass, Regina. 1990. *Relevance relations in discourse: a study with special reference to Sissala*. Cambridge: Cambridge University Press.
- Blass, Regina. 1993. Constraints on Relevance in Koine Greek in the Pauline Letters. Paper presented at the *Summer Institute of Linguistics: Exegetical Seminar* (Nairobi).
- Blass, Regina. 2000. Particles, propositional attitude and mutual manifestness. In Andersen & Fretheim (eds.), pp. 39-52.
- Blettner, Elizabeth. 1983. One Made Many and Many Made One: The Role of Asyndeton in Aristotle's Rhetoric. *Philosophy & Rhetoric* 16:49-54.
- Bolly, Catherine and Degand, Liesbeth. 2013. Have you seen what I mean? From verbal constructions to discourse markers. *Journal of Historical Pragmatics* 14:210-235.
- Bonifazi, Anna. 2008. Memory and Visualization in Homeric Discourse Markers. In *Orality, Literacy, Memory in the Ancient Greek and Roman World*, ed. by Mackay, E. Anne, 35-64, Leiden: Brill.
- Bonifazi, Anna. 2012. *Homer's Versicolored Fabric: The Evocative Power of Ancient Greek Epic Word-Making*. Cambridge, Mass.: Harvard University Press.
- Bonifazi, Anna. 2016 (pre-print online publication). Volume IV. Particle Use in Herodotus and Thucydides. In Bonifazi et al., accessed online via <http://chs.harvard.edu/CHS/article/display/6215> (last accessed 11th of November, 2016).
- Bonifazi, Anna, Drummen, Annemieke and Kreij, Mark de. 2016 (pre-print online publication). *Particles in ancient Greek discourse: Five volumes exploring particle use across genres*. Washington, D.C.: Center for Hellenic Studies. Accessed online via <http://chs.harvard.edu/CHS/article/display/6391> (last accessed 11th of November, 2016).

- Borderia, Salvador P. 2008. Do discourse markers exist? On the treatment of discourse markers in Relevance Theory. *Journal of Pragmatics* 40:1411-1434.
- Bowie, Ewen. 2012. Heliodorus. In *Oxford Classical Dictionary*, ed. by Hornblower, Simon, Spawforth, Anthony, and Eidinow, Esther, 654-655, Oxford: Oxford University Press.
- Breheny, Richard. 2002. The current state of (radical) pragmatics in the cognitive sciences. *Mind & Language* 17:169-187.
- Breul, Carsten. 2007. A relevance-theoretic view on issues in the history of clausal connectives. In *Connectives in the History of English*, ed. by Lenker, Ursula, and Meurman-Solin, Anneli, 167-192, Amsterdam/Philadelphia: John Benjamins.
- Brinton, Laurel J. 1996. *Pragmatic Markers in English. Grammaticalization and Discourse Functions*. Berlin/New York: Mouton de Gruyter.
- Brinton, Laurel J. 2008. *The comment clause in English: syntactic origins and pragmatic development*. Cambridge: Cambridge University Press.
- Brown, Penelope and Levinson, Stephen C. 1987. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Brown Ferrario, Sarah. 2014. *Historical Agency and the 'Great Man' in Classical Greece*. Cambridge: Cambridge University Press.
- Burton-Roberts, Noel. 2005. Robyn Carston on semantics, pragmatics and 'encoding'. *Journal of Linguistics* 41:389-407.
- Burton-Roberts, Noel (ed.). 2007. *Pragmatics*. New York: Palgrave Macmillan.
- Buyse, Lieven. 2012. So as a multifunctional discourse marker in native and learner speech. *Journal of Pragmatics* 44:1764-1782.
- Capone, Alessandro, Lo Piparo, Franco, and Carapezza, Marco (eds.). *Perspectives on Linguistic Pragmatics*. Dordrecht: Springer.
- Carruthers, Peter. 2006a. The Case for Massively Modular Models of Mind. In Stainton (ed.), pp. 3-21.
- Carruthers, Peter. 2006b. Simple Heuristics Meet Massive Modularity. In Carruthers et al. (eds.), pp. 181-198.
- Carruthers, Peter and Chamberlain, Andrew T. 2000. *Evolution and the human mind: Modularity, language and meta-cognition*. Cambridge: Cambridge University Press.
- Carruthers, Peter, and Laurence, Stephen, and Stich, Stephen (eds.). 2006. *The Innate Mind (Volume 2: Culture and Cognition)*. Oxford: Oxford University Press.
- Carston, Robyn 1993. Conjunction, Explanation and Relevance. *Lingua* 90:27-48.
- Carston, Robyn. 2002a. *Thoughts and utterances: the pragmatics of explicit communication*. Oxford: Blackwell.
- Carston, Robyn 2002b. Linguistic meaning, communicated meaning and cognitive pragmatics. *Mind & Language* 17:127-148.
- Carston, Robyn. 2003. Truth-conditional content and conversational implicature. *UCL Working Papers in Linguistics* 15:303-335.
- Carston, Robyn. 2004. Relevance Theory and the Saying/Implicating Distinction. In Horn & Ward (eds.), pp. 633-656.
- Carston, Robyn. 2007. How Many Pragmatic Systems Are There? In *Saying, Meaning, Referring: Essays on the Philosophy of François Recanati*, ed. by Frappoli, Maria-José, 18-48, New York: Palgrave Macmillan.
- Carston, Robyn. 2010. Explicit Communication and 'Free' Pragmatic Enrichment. In *Explicit Communication: Robyn Carston's Pragmatics*, ed. by Soria, Belén, and Romero, Esther, 217-285, New York: Palgrave Macmillan.
- Carston, Robyn. 2016. The heterogeneity of procedural meaning. *Lingua* 175:154-166.

- Carston, Robyn, and Powell, George. 2006. Relevance Theory – New Directions and Developments. In *The Oxford Handbook of Philosophy of Language*, ed. by Lepore, Ernest and Smith, Barry C., 341-360, Oxford: Oxford University Press.
- Carston, Robyn, and Wearing, Catherine. 2011. Metaphor, hyperbole and simile: A pragmatic approach. *Language and Cognition* 3:283-312.
- Casson, Sarah. 2014. The Greek connective *gar*: Procedural meaning and persuasion. Different genres, different effects? Paper presented at the 7th *Interpreting for Relevance: Discourse and Translation Conference* (Warsaw).
- Celle, Agnès, and Huart, Ruth (eds.). 2007. *Connectives as Discourse Landmarks*. Amsterdam/Philadelphia: John Benjamins.
- Chafe, Wallace L. 1987. Cognitive Constraints on Information Flow. In *Coherence and Grounding in Discourse*, ed. by Tomlin, Russell, 21-51, Amsterdam/Philadelphia: John Benjamins.
- Chafe, Wallace L. 1988a. Linking Intonation Units in Spoken English. In *Clause Combining in Grammar and Discourse*, ed. by Haiman, John and Thompson, Sandra A., 1-27, Amsterdam/Philadelphia: John Benjamins.
- Chafe, Wallace L. 1988b. Punctuation and the Prosody of Written Language. *Written Communication* 5:395-426.
- Chafe, Wallace L. 1994. *Discourse, consciousness, and time: the flow and displacement of conscious experience in speaking and writing*. Chicago: University of Chicago Press.
- Charteris-Black, Jonathan. 2006. *Politicians and Rhetoric. The Persuasive Power of Metaphor*. New York: Palgrave Macmillan.
- Cherniak, Christopher. 1981. Minimal Rationality. *Mind* 90:161-183.
- Chiappe, Dan L., and Kukla, Andre. 1996. Context selection and the frame problem. *Behavioral and Brain Sciences* 19:529-30.
- Clark, Billy. 2013. *Relevance theory*. Cambridge: Cambridge University Press.
- Clark, Billy. 2014. Pragmatics and inference. In *The Cambridge Handbook of Stylistics*, ed. by Stockwell, Peter, and Whiteley, Sara, 300-314, Cambridge: Cambridge University Press.
- Cohen, L. Jonathan. 1971. Some Remarks on Grice's Views about the Logical Particles of Natural Language. In *Pragmatics of Natural Languages*, ed. by Bar-Hillel, Yehoshuah, 50-68, Dordrecht: D. Reidel Publishing.
- Colston, Herbert L. 2015. *Using Figurative Language*. Cambridge: Cambridge University Press.
- Cosmides, Leda and Tooby, John. 1994. Origins of domain specificity: The evolution of functional organization. In Hirschfeld & Gelman (eds.) pp. 85-116.
- Cribiore, Raffaella. 2007. *The School of Libanius in Late Antique Antioch*. Princeton: Princeton University Press.
- Cruse, D. Alan. 1986. *Lexical Semantics*. Cambridge: Cambridge University Press.
- Cruttenden, Alan. 1986. *Intonation*. Cambridge: Cambridge University Press.
- Cuenca, Maria-Josep. 2003. Two ways to reformulate: a contrastive analysis of reformulation markers. *Journal of Pragmatics* 35:1069-1093.
- Cuenca, Maria-Josep and Bach, Carme. 2007. Contrasting the form and use of reformulation markers. *Discourse Studies* 9:149-175.
- Cummings, Louise. The scientific reductionism of relevance theory: The lesson from logical positivism. *Journal of Pragmatics* 29:1-12.
- Curcó, Carmen. 2004. Procedural constraints on context selection. *Siempre* as a discourse marker. In *Current Trends in the Pragmatics of Spanish*, ed. by Márquez-Reiter, Rosina and Placencia, Maria-Elena, 179-201, Amsterdam/Philadelphia: John Benjamins.
- Curcó, Carmen. 2011. On the Status of Procedural Meaning in Natural Language. In Escandell-Vidal et al. (eds.), pp. 33-54.

- Dam, Raymond van. 2002. *Kingdom of Snow: Roman Rule and Greek Culture in Cappadocia*. Philadelphia: University of Pennsylvania Press.
- Dedaic, Mirjana N. 2010. Reformulating and concluding: The pragmatics of the Croatian discourse marker *dakle*. In *South Slavic Discourse Particles*, ed. by Dedaic, Mirjana N., and Miskovic-Lukovic, Mirjana, 109-131, Amsterdam/Philadelphia: John Benjamins.
- Deferrari, Roy J. 1918. The Classics and the Greek Writers of the Early Church: Saint Basil. *The Classical Journal* 13:579-591.
- Degand, Liesbeth and Evers-Vermeul, Jacqueline. 2015. Grammaticalization or pragmaticalization of discourse markers? More than a terminological issue. *Journal of Historical Pragmatics* 16:59-85.
- Demoen, Kristoffel. 1993. *Retoriek en hermeneutiek in de pagane en bijbelse paradeigmata in de poëzie van Gregorios van Nazianze*. Ghent: Ghent University. [doctoral dissertation]
- Denniston, J. D. 1954². *The Greek particles*. Oxford: Clarendon Press.
- Des Places, Édouard. 1929. *Études sur quelques particules de liaison chez Platon: Collection d'études anciennes*. Paris: Les Belles lettres.
- Devarius, Matthaeus. 1588. *Liber de Graecae linguae particulis*. Rome: Francisco Zannetti.
- Diewald, Gabriele. 2011. Pragmaticalization (defined) as grammaticalization of discourse functions. *Linguistics* 49:365-390.
- Dijk, Teun A. van. 1979. Pragmatic connectives. *Journal of Pragmatics* 3:447-456.
- Dik, Helma. 1995. *Word order in ancient Greek: a pragmatic account of word order variation in Herodotus*. Amsterdam: J.C. Gieben.
- Dik, Helma. 2003. On Unemphatic 'Emphatic' Pronouns in Greek: Nominative Pronouns in Plato and Sophocles. *Mnemosyne* 56:535-550.
- Dik, Helma. 2007. *Word order in Greek tragic dialogue*. Oxford: Oxford University Press.
- Dobzhansky, Theodosius. 1973. Nothing in Biology Makes Sense except in Light of Evolution. *American Biology Teacher* 35:125-129.
- Dontcheva-Navratilova, Olga, and Povolná, Renata. 2009. *Coherence and cohesion in spoken and written discourse*. Newcastle: Cambridge Scholars.
- Dover, Kenneth J. 1960. *Greek word order*. Cambridge: Cambridge University Press.
- Drozdowicz, Anna. 2016. Descriptive ineffability reconsidered. *Lingua* 177:1-16.
- Drummen, Annemieke. 2009. Discourse Cohesion in Dialogue. Turn-initial ἀλλά in Greek Drama. In Bakker & Wakker (eds.), pp. 135-154.
- Drummen, Annemieke. 2013. Coherence. In *Encyclopedia of Ancient Greek Language and Linguistics*, ed. by Giannakis, Georgios K. Leiden: Brill. Accessed online via http://referenceworks.brillonline.com/entries/encyclopedia-of-ancient-greek-language-and-linguistics/coherence-SIM_00000428?s.num=4 (last accessed 11th of November, 2016).
- Drummen, Annemieke. 2015. *Dramatic pragmatics. A discourse approach to particle use in ancient Greek tragedy and comedy*. Heidelberg: University of Heidelberg. [doctoral dissertation]
- Du Bois, John W. 2007. The stance triangle. In *Stancetaking in Discourse. Subjectivity, evaluation, interaction*, ed. by Englebretson, Robert, 139-182, Amsterdam/Philadelphia: John Benjamins.
- Dunbar, Robin I. M. 2003. The social brain: Mind, language, and society in evolutionary perspective. *Annual Review of Anthropology* 32:163-181.
- Eckardt, Regine. 2006. *Meaning change in grammaticalization: an enquiry into semantic reanalysis*. Oxford: Oxford University Press.
- Edwards, Mark W. 2002. *Sound, Sense, and Rhythm: Listening to Greek and Latin Poetry*. Princeton: Princeton University Press.
- Egea, José M. 1990. Notas sobre dos partículas del griego medio. *Veleia* 7:293-301.

- Elm, Susanna. 2012. *Sons of Hellenism, Fathers of the Church: Emperor Julian, Gregory of Nazianzus, and the Vision of Rome*. Berkeley: University of California Press.
- Escandell-Vidal, Victoria, and Leonetti, Manuel. 2011. On the Rigidity of Procedural Meaning. In Escandell-Vidal et al. (eds.), pp. 81-102.
- Escandell-Vidal, Victoria, and Leonetti, Manuel, and Ahern, Aoife (eds.). 2011a. *Procedural Meaning: Problems and Perspectives*. Bingley: Emerald Group Publishing.
- Escandell-Vidal, Victoria, and Leonetti, Manuel, and Ahern, Aoife. 2011b. Introduction. In Escandell-Vidal et al. (eds.), pp. xvii-xlv.
- Evers-Vermeul, Jacqueline. 2005. *The development of Dutch connectives. Change and acquisition as windows on form-function relations*. Utrecht: University of Utrecht. [doctoral dissertation]
- Ferré, Gaëlle. 2011. Multimodal Analysis of Discourse Markers 'donc', 'alors' and 'en fait' in Conversational French. *International Congress of Phonetic Sciences XVII*:671-674.
- Filliettaz, Laurent, and Roulet, Eddy. 2002. The Geneva Model of discourse analysis: an interactionist and modular approach to discourse organization. *Discourse Studies* 4:369-393.
- Fischer, Kerstin. 2000. *From cognitive semantics to lexical pragmatics: the functional polysemy of discourse particles*. Berlin/New York: Mouton de Gruyter.
- Fischer, Kerstin (ed.). 2006a. *Approaches to Discourse Particles*. Amsterdam: Elsevier.
- Fischer, Kerstin. 2006b. Towards an understanding of the spectrum of approaches to discourse particles: introduction to the volume. In Fischer (ed.), pp. 1-20.
- Fish, Stanley. 2015. On King v. Burwell: What Is a Natural Reading? *The Huffington Post*, 29th of June, 2016. Accessed online via http://www.huffingtonpost.com/stanley-fish/what-is-a-natural-reading_b_7686800.html (last accessed 11th of November, 2016).
- Flottum, Kjersti. 1994. À propos de *c'est-à-dire* et ses correspondants norvégiens, *Cahiers de Linguistique Française* 15:109-129.
- Fodor, Jerry A. 1983. *The Modularity of Mind*. Cambridge, Mass.: The MIT Press.
- Fodor, Jerry A. 1990. *A Theory of Content and Other Essays*. Cambridge, Mass.: The MIT Press.
- Foolen, Adrianus Peter. 1993. *De betekenis van partikels: Een dokumentatie van de stand van het onderzoek, met bijzondere aandacht voor maar*. Nijmegen: Katholieke Universiteit Nijmegen. [doctoral dissertation]
- Fowler, Harold N. 1914. *Plato: Euthyphro. Apology. Crito. Phaedo. Phaedrus* (translation Fowler). Cambridge, Mass.: Harvard University Press.
- Fowler, Harold N. 1921. *Plato: Theaetetus. Sophist* (translation Fowler). Cambridge, Mass.: Harvard University Press.
- Fowler, Robert L. 2007. Early Historie and Literacy. In Luraghi (ed.), pp. 95-115.
- Fraenkel, J.J. 1947. A question in connection with Greek particles. *Mnemosyne* 13:183-201.
- Fraser, Bruce. 1990. An Approach to Discourse Markers. *Journal of Pragmatics* 14:383-395.
- Fraser, Bruce. 1996. Pragmatic Markers. *Pragmatics* 6:167-190.
- Fraser, Bruce. 1999. What are discourse markers? *Journal of Pragmatics* 31:931-952.
- Fuller, Janet M. 2003. The influence of speaker roles on discourse marker use. *Journal of Pragmatics* 35:23-45.
- Fraser, Bruce. 2006a. Towards a theory of discourse markers. In Fischer (ed.), pp. 189-204.
- Fraser, Bruce. 2006b. On the Conceptual-Procedural Distinction. *Style* 40:24-32.
- Fraser, Bruce. 2001. The clause start in Ancient Greek: focus and the second position. *Glotta* 77:138-177.
- Frege, Gottlob. 1892. Über Sinn und Bedeutung. *Zeitschrift für Philosophie und philosophische Kritik* 100:25-50.

- Gargani, Adam. 2014. *Poetic Comparisons. How similes are understood*. Salford: University of Salford. [doctoral dissertation]
- Gargani, Adam. 2016. Similes as poetic comparisons. *Lingua* 175-176:54-68.
- Gazdar, Gerald. 1979. *Pragmatics: Implicature, Presupposition, and Logical Form*. New York: Academic Press.
- George, Coulter. 2009. Greek Particles: Just a Literary Phenomenon? In Bakker & Wakker (eds.), pp. 155-169.
- George, Coulter. 2015. Homeric ἄρα: consequential or visualizing? Paper presented at the *International Colloquium on Ancient Greek Linguistics* (Rome).
- George, Coulter. Fc. Homeric ἄρα: An (in)consequential particle. *Classical Philology*.
- Gibbs, Raymond W., and Bryant, Gregory A. 2008. Striving for optimal relevance when answering questions. *Cognition* 106:345-369.
- Gibbs, Raymond W., and Moise, Jessica F. 1997. Pragmatics in understanding what is said. *Cognition* 62:51-74.
- Giet, Stanislas. 1968. *Homélie sur l'Hexaéméron: Sources chrétiennes*,. Paris: Éditions du Cerf.
- Gigerenzer, Gerd. 2006. Bounded and Rational. In Stainton (ed.), pp. 115-133.
- Gigerenzer, Gerd. 2008. Why Heuristics Work. *Perspectives on Psychological Science* 3:20-29.
- Gigerenzer, Gerd and Selten, Reinhard. 2002. Rethinking Rationality. In *Bounded Rationality: The Adaptive Toolbox*, ed. by Gigerenzer, Gerd and Selten, Reinhard, 1-12, Cambridge, Mass.: The MIT Press.
- Gigerenzer, Gerd, Todd, Peter M., and ABC Research Group. 1999. *Simple heuristics that make us smart: Evolution and cognition*. Oxford: Oxford University Press.
- Giora, Rachel. 1997. Discourse coherence and theory of relevance: Stumbling blocks in search of a unified theory. *Journal of Pragmatics* 27:17-34.
- Giroto, Vittorio, Kemmelmeier, Markus, Sperber, Dan, and van der Henst, Jean-Baptiste. 2001. Inept reasoners or pragmatic virtuosos? Relevance and the deontic selection task. *Cognition* 81:B69-B76.
- Givón, Talmy. 1995. Coherence in text vs. coherence in mind. In *Coherence in spontaneous text*, ed. by Gernsbacher, Morton Ann and Givón, Talmy, 59-115, Amsterdam/Philadelphia: John Benjamins.
- Givón, Talmy. 2001. *Syntax: An Introduction (Volume II)*. Amsterdam/Philadelphia: John Benjamins.
- Grice, H. Paul. 1975. Logic and Conversation. In *Syntax and Semantics, volume 3: Speech Acts*, ed. by Cole, Peter and Morgan, Jerry, 43-58, New York: Academic Press.
- Grice, H. Paul. 1989. *Studies in the way of words*. Cambridge, Mass.: Harvard University Press.
- Glanzberg, Michael. 2005. Focus: A Case Study on the Semantics-Pragmatics Boundary. In *Semantics versus Pragmatics*, ed. by Szabó, Zoltán Gendler, 72-110, Oxford: Oxford University Press.
- Goldhill, Simon. 2006. Rhetoric and the Second Sophistic. In Gunderson (ed.), pp. 228-241.
- Grimes, Joseph Evans. 1975. *The thread of discourse*. The Hague: Mouton.
- Grosz, Barbara J. and Sidner, Candace L. 1986. Attention, Intentions, and the Structure of Discourse. *Computational Linguistics* 12:175-204.
- Gundel, Jeanette K. and Fretheim, Thorstein. 2004. Topic and Focus. In Horn & Ward (eds.), pp. 175-196.
- Gundel, Jeanette K., Hedberg, Nancy, and Zacharski, Ron. 2012. Underspecification of Cognitive Status in Reference Production: Some Empirical Predictions. *Topics in Cognitive Science* 4:249-268.
- Gunderson, Erik. 2006. *The Cambridge Companion to Ancient Rhetoric*. Cambridge: Cambridge University Press.

- Gutiérrez Rexach, Javier. 1998. Rhetorical Questions, Relevance and Scales. *Revista Alicantina de Estudios Ingleses* 11:139-155.
- Hagoort, Peter. 2015. Linguistics quo vadis? An outsider perspective. *The Science of Language Blog*, February 16th, 2015. Accessed online via <http://thescienceoflanguage.com/2015/02/16/linguistics-quo-vadis-an-outsider-perspective/> (last accessed 11th of November, 2016).
- Hall, Alison. 2004. The meaning of *but*: a procedural reanalysis. *UCL Working Papers in Linguistics* 16:199-236.
- Hall, Alison. 2009. 'Free' enrichment and the nature of pragmatic constraints. *UCL Working Papers in Linguistics* 21:93-123.
- Hall, Alison. 2013. Relevance Theory, Semantic Content and Pragmatic Enrichment. In Capone et al. (eds.), pp. 99-130.
- Halliday, Michael A. K. 1985. *An introduction to functional grammar*. London: E. Arnold.
- Halliday, Michael A. K., and Hasan, Ruqaiya. 1976. *Cohesion in English*. London: Longman.
- Hannay, Mike and Kroon, Caroline. 2005. Acts and the relationship between discourse and grammar. *Functions of Language* 12:87-124.
- Hansen, Maj-Britt Mosegaard. 1997. *Alors* and *donc* in spoken French: A reanalysis. *Journal of Pragmatics* 28:153-187.
- Hansen, Maj-Britt Mosegaard. 1998. The semantic status of discourse markers. *Lingua* 104:235-260.
- Hansen, Maj-Britt Mosegaard. 2002. Syntax in interaction: Form and function of yes/no interrogatives in spoken standard French. *Studies in Language* 25:463-520.
- Hansen, Maj-Britt Mosegaard. 2005. From prepositional phrase to hesitation marker. The semantic and pragmatic evolution of French *enfin*. *Journal of Historical Pragmatics* 6:37-68.
- Hansen, Maj-Britt Mosegaard. 2008. *Particles at the Semantics/Pragmatics Interface: Synchronic and Diachronic Issues*. Amsterdam: Elsevier.
- Hartung, Johann A. 1828. *Commentatio de particulis δὴ et ἤδη*. Erlangen: Typis Jungeanis.
- Heine, Bernd. 2013. On discourse markers: Grammaticalization, pragmaticalization, or something else? *Linguistics* 51:1205-1247.
- Henderson, Annette M.E., Sabbagh, Mark A., and Woodward, Amanda L. 2013. Preschoolers' selective learning is guided by the principle of relevance. *Cognition* 126:246-257.
- Henderson, John M., Malcolm, George L., and Schandl, Charles 2009. Searching in the dark: Cognitive relevance drives attention in real-world scenes. *Psychonomic Bulletin & Review* 16:850-856.
- Hengeveld, Kees, and Mackenzie, J. Lachlan. 2008. *Functional discourse grammar: a typologically-based theory of language structure*. Oxford: Oxford University Press.
- Henst, Jean-Baptiste van der and Sperber, Dan. 2004. Testing the Cognitive and Communicative Principles of Relevance. In Noveck & Sperber (eds.), pp. 141-171.
- Higginbotham, James. 1986. Linguistic theory and Davidson's program in semantics. In *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson*, ed. by Lepore, Ernest, 29-48, Oxford: Blackwell.
- Hilton, John L. 2001. The dream of Charikles (4.14.2): intertextuality and irony in the *Ethiopian Story of Heliodorus*. *Acta Classica* 44:77-86.
- Hirschfeld, Lawrence R. and Gelman, Susan A (eds.). 1994. *Mapping the mind: Domain specificity in cognition and culture*. Cambridge: Cambridge University Press.
- Hobbs, Jerry R. 1979. Coherence and Coreference. *Cognitive Science* 3:67-90.
- Hobbs, Jerry R. 1985. *On the Coherence and Structure of Discourse*. Report No. CSLI-85-37 (Center for the Study of Language and Information, Stanford University).
- Hobbs, Jerry R. and Redeker, Gisele. 1997. *A Note on Coherence Relations* [unpublished ms.].

- Hoogeveen, Hendrik. 1769. *Doctrina particularum linguae Graecae* (2 volumes). Leiden: E Typographeo Dammeano.
- Horn, Laurence R. 1989. *A Natural History of Negation*. Chicago: The University of Chicago Press.
- Horn, Laurence R. 2005. The Border Wars: A Neo-Gricean Perspective. In *Where Semantics Meets Pragmatics*, ed. by Von Stechow, Klaus and Turner, Ken, 21-48, Amsterdam: Elsevier.
- Horn, Laurence R. 2007. Neo-Gricean Pragmatics: A Manichaeian Manifesto. In Burton-Roberts (ed.), pp. 158-183.
- Horn, Laurence R. 2013. I Love Me Some Datives: Expressive Meaning, Free Datives, and F-Implicature, In *Beyond expressives: Explorations in Use-Conditional Meaning*, ed. by Gutzmann, Daniel and Gärtner, Hans-Martin, 151-200, Leiden: Brill.
- Horn, Laurence R., and Ward, Gregory. 2004. *The Handbook of Pragmatics*. Oxford: Blackwell.
- Horrocks, Geoff. 2010². *Greek: A History of the Language and its Speakers*. Oxford: Wiley-Blackwell.
- Hovy, Eduard H. 1990. Parsimonious and profligate approaches to the question of discourse structure relations. *Proceedings of the 5th International Workshop on Natural Language Generation* (Pennsylvania), pp. 128-136.
- Hovy, Eduard H. and Maier, Elisabeth. 1995. *Parsimonious or Profligate: How Many and Which Discourse Structure Relations?* [unpublished ms.]
- Huang, Yan. 2007. *Pragmatics*. Oxford: Oxford University Press.
- Ifantidou, Elly. 2001. *Evidentials and Relevance*. Amsterdam/Philadelphia: John Benjamins.
- Innes, Bronwen. 2010. "Well, that's why I asked the question sir": Well as a discourse marker in court. *Language in Society* 39:95-117.
- Iten, Corinne. 2005. *Linguistic meaning, truth conditions and relevance : the case of concessives*. New York: Palgrave Macmillan.
- Jackson, Blomfield (edited by Kevin Knight). 1895. Basil's Hexaemeron: translated by the Rev. Blomfield Jackson. In *Nicene and Post-Nicene Fathers (Second Series, volume 8)*, ed. by Schaff, Philip and Wace, Henry. Buffalo, N.Y.: Christian Literature Publishing Co. Accessed online via <http://www.newadvent.org/fathers/3201.htm> (last accessed 11th of November, 2016).
- Janse, Mark. 1993. The Prosodic Basis of Wackernagel's Law. *Proceedings of the XVth International Congress of Linguists: Endangered Languages* 1-4:19-23.
- Janse, Mark. 1998. Prosodie en metrie van het Homerische epos: orale poëzie in de praktijk. *Didactica Classica Gandensia* 38:125-151.
- Janse, Mark. 2002. Alexandrian Grammatical Theory in Practice. Apollonius Dyscolus and the Personal Pronouns. In *Grammatical Theory and Philosophy of Language*, ed. by Swiggers, Pierre and Wouters, Alfons, 233-255, Louvain: Peeters.
- Janse, Mark. 2008. Clitic doubling from Ancient to Asia Minor Greek. In *Clitic Doubling in the Balkan Languages*, ed. by Kallulli, Dalina and Tasmowski, Liliane, 165-202, Amsterdam/Philadelphia: John Benjamins.
- Jebb, Richard. 1887. Sophocles. *The Oedipus Tyrannus* (text, English translation and notes). Cambridge: Cambridge University Press.
- Johansson, Sverker. 2005. *Origins of Language: Constraints on hypotheses*. Amsterdam/Philadelphia: John Benjamins.
- Jong, Irene J.F. 1997. Γάp introducing embedded narratives. In Rijksbaron (ed.), pp. 175-185.
- Jonge, Casper C. de. 2008. *Between grammar and rhetoric: Dionysius of Halicarnassus on language, linguistics and literature*. Leiden: Brill.
- Jowett, Benjamin. 1900. *Thucydides, translated into English, to which is prefixed an essay on inscriptions and a note on the geography of Thucydides*. Oxford: Clarendon Press.

- Jucker, Andreas H. 1993. The discourse marker *well*: a relevance-theoretical account. *Journal of Pragmatics* 19:435-452.
- Kalokerinos, Alexis. 2004. The justifying connection, mostly in Greek. *Journal of Greek Linguistics* 5:27-80.
- Karttunen, Lauri and Peters, Stanley. 1979. Conventional implicature. In *Syntax and Semantics*, volume 11: Presupposition, ed. by Oh, Choon-Kyu and Dinneen, David A, 1-56, New York: Academic Press.
- Kehler, Andrew. 2004. Discourse Coherence. In Horn & Ward (eds.), pp. 241-265.
- Kennedy, George A. 1999. *Classical Rhetoric & Its Christian & Secular Tradition from Ancient to Modern Times*. Chapel Hill: University of North Carolina Press.
- King, C.W. 1888. *Julian The Emperor. Containing Gregory of Nazianzen's Two Invectives, and Libanius' Monody, with Julian's Extant Theosophical Works*. London: George Bell and Sons. Accessed online via http://www.tertullian.org/fathers/gregory_nazianzen_1_preface.htm (last accessed 11th of November, 2016).
- Klein, Jared S. 1992. Some Indo-European Systems of Conjunction: Rigveda, Old Persian, Homer. *Harvard Studies in Classical Philology* 94:1-51.
- Klerk, Vivian de. 2005. Procedural meanings of *well* in a corpus of Xhosa English. *Journal of Pragmatics* 37:1183-1205.
- Knott, Alistair and Sanders, Ted. 1998. The classification of coherence relations and their linguistic markers: An exploration of two languages. *Journal of Pragmatics* 30:135-175.
- Koier, Elizabeth. 2013. *Interpreting particles in dead and living languages. A construction grammar approach to the semantics of Dutch ergens and Ancient Greek pou*. Leiden: Universiteit Leiden. [doctoral dissertation]
- Kovacs, David. *Euripides: Cyclops. Alceste. Medea* (edition and translation by Kovacs). Cambridge, Mass.: Harvard University Press.
- König, Ekkehard. 1991. *The meaning of focus particles: A comparative perspective*. London: Routledge.
- Kreij, Mark de. 2014. *The Metalanguage of Performance. A discourse perspective on particle use in Homer and Pindar*. Heidelberg: University of Heidelberg. [doctoral dissertation]
- Kreij, Mark de. 2016 (pre-print online publication). From σύνδεσμοι to particulae. In Bonifazi et al., accessed online via <http://chs.harvard.edu/CHS/article/display/62006215> (last accessed 16th of November, 2016).
- Kroon, Caroline. 1989. Causal connectors in Latin: the discourse function of *nam*, *enim*, *igitur* and *ergo*. In *Proceedings of the Vth Colloquium on Latin Linguistics*, ed. by Lavency, Marius and Longrée, Dominique, pp. 231-243. Louvain: Peeters.
- Kroon, Caroline. 1995. *Discourse particles in Latin: a study of nam, enim, autem, vero, and at*. Amsterdam: J.C. Gieben.
- Kroon, Caroline. 1998. A framework for the description of Latin discourse markers. *Journal of Pragmatics* 30:205-223.
- Kroon, Caroline. 2009. Latin Linguistics between Grammar and Discourse. Units of Analysis, Levels of Analysis. In *Pragmatische Kategorien. Form, Funktion und Diachronie*, ed. by Rieken, Elisabeth and Widmer, Paul, 143-158. Wiesbaden: Reichert.
- Kroon, Caroline. 2011. Latin Particles and the Grammar of Discourse. In *A Companion to the Latin Language*, ed. by Clackson, James, 176-195. Oxford: Blackwell.
- Krylová, Barbora. 2006. Consensus suggested and demanded: The use and role of *enim* and *ergo* in conflict management. *Graecolatina Pragensia* XX:95-107.

- Kutas, Marta. 2006. One lesson learned: Frame language processing - Literal and figurative - as a human brain function. *Metaphor and Symbol* 21:285-325.
- Labéy, Daniel. *Manuel des particules grecques*. Paris: C. Klincksieck.
- Lallot, Jean. 1997. *Apollonius Dyscole. De La Construction (volume 1)*. Paris: Librairie Philosophique J. Vrin.
- Lallot, Jean. 1998. *La grammaire de Denys le Thrace*. Paris: CNRS Editions.
- Lamb, Walter R.M. 1924. *Plato: Laches. Protagoras. Meno. Euthydemus* (translation Lamb). Cambridge, Mass.: Harvard University Press.
- Lamb, Walter. 1997. Translation (with notes) of Heliodorus' Ethiopian Story. In Lamb & Morgan, pp. 3-285.
- Lamb, Walter and Morgan, John R. 1997. *Heliodorus: Ethiopian Story*. London: Everyman.
- Lambrecht, Knud. 1994. *Information structure and sentence form: topic, focus, and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Langslow, David R. 2000. Latin discourse particles, 'medical Latin' and 'classical Latin'. *Mnemosyne* 53:537-560.
- Larsen, Ivar. 1991 (revised 2001). Word Order and Relative Prominence in New Testament Greek. *Notes on Translation* 5:29-34.
- Lascarides, Alex, and Asher, Nicholas. 1993. Temporal Interpretation, Discourse Relations and Commonsense Entailment. Determining Relations between the Propositions in a Text and the Events They Describe. *Linguistics and Philosophy* 16:437-493.
- Lay Vivien, Ler Soon. 2006. A relevance-theoretic approach to discourse particles in Singapore English. In Fischer (ed.), pp. 149-166.
- Lenk, Uta. 1998a. Discourse markers and global coherence in conversation. *Journal of Pragmatics* 30:245-257.
- Lenk, Uta. 1998b. *Marking Discourse Coherence: Functions of Discourse Markers in Spoken English*. Tübingen: Gunter Narr Verlag.
- Levinsohn, Stephen H. 1987. *Textual Connections in Acts*. Atlanta: Scholars Press.
- Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- Levinson, Stephen C. 1989. A review of *Relevance: Communication and Cognition*. *Journal of Linguistics* 25:455-472.
- Levinson, Stephen C. 2000. *Presumptive meanings : the theory of generalized conversational implicature: Language, speech, and communication*. Cambridge, Mass.: MIT Press.
- Liebal, Katja, Waller, Bridget M., Burrows, Anne M. and Slocombe, Katie E. 2014. *Primate Communication. A Multimodal Approach*. Cambridge: Cambridge University Press.
- Lindsay, Jack. 1926. *Aristophanes: Lysistrata*. London: Fanfrolico Press.
- Locke, John (ed. by Fraser, Alexander C.). 1959. *An essay concerning human understanding (volume 2)*. New York: Dover Publications.
- Loopstra, Jonathan. 2010. The Trouble with ἐπιφέρειτο: Basil's *Hexaemeron* 2.6 in Context. *Orientalia Christiana Periodica* 76:145-160.
- Loudová, Katerina. 2009a. Discourse Markers in Early Byzantine Narrative Prose. *Studies in Greek Linguistics: Proceedings of the Annual Meeting of the Department of Linguistics, School of Philology, Faculty of Philosophy - Aristotle University of Thessaloniki* (2008): 296-312.
- Loudová, Katerina. 2009b. On functional analysis of Greek sentence structure. *Graecolatina et Orientalia Bratislava XXXI-XXXII*:55-65.
- Loudová, Katerina. 2014. On the Category of Particles in Byzantium. In *The Language of Byzantine Learned Literature*, ed. by Hinterberger, Martin, 147-169, Turnhout: Brepols.
- LSJ = Liddell, Henry G., Scott, Robert, Jones, Henry S. and McKenzie, Roderick. 1996. *Greek-English Lexicon. With a Revised Supplement*. Oxford: Clarendon Press. Accessed online

- via <http://archimedes.fas.harvard.edu/pollux/> (last accessed 11th of November, 2016).
- Luchjenbroers, June. 1989. Relevance theory and context selection. A discussion of Sperber & Wilson's comprehension model. *La Trobe University Working Papers in Linguistics* 2:191-204.
- Lumb, T.W., Rattenbury, Robert M. and Maillon, Jean. 1960. *Les Éthiopiennes (Théagène et Chariclée)* – 3 volumes, 2nd edition. Paris: Les Belles Lettres.
- Luraghi, Nino (ed.). 2007. *The Historian's Craft in the Age of Herodotus*. Oxford: Oxford University Press.
- Macaulay, G.C. 1890. *The History of Herodotus (with English and Greek in parallel)*. London: Macmillan.
- Macaulay, R. 2002. You know, it depends. *Journal of Pragmatics* 34:749-767.
- Maeschler, Yael. 1994. Metalinguaging and Discourse Markers in Bilingual Conversation. *Language in Society* 23:325-366.
- Maeschler, Yael and Schiffrin, Deborah. 2015. Discourse Markers: Language, Meaning, and Context. In *The Handbook of Discourse Analysis (Second Edition)*, ed. by Tannen, Deborah, Hamilton, Heidi E. and Schiffrin, Deborah, 189-221, Oxford: Wiley-Blackwell.
- Maier, Elisabeth and Hovy, Eduard H. 1993. Organizing Discourse Structure Relations using Metafunctions. In *New Concepts in Natural Language Generation: Planning, Realization, and Systems*, ed. by Horacek, Helmut and Zock, Michael, 69-86, London: Pinter.
- Maillat, Didier. 2013. Constraining context selection: On the pragmatic inevitability of manipulation. *Journal of Pragmatics* 59:190-199.
- Maillat, Didier and Oswald, Steve. 2009. Defining Manipulative Discourse: The Pragmatics of Cognitive Illusions. *International Review of Pragmatics* 1:348-370.
- Maillat, Didier and Oswald, Steve. 2011. Constraining context: a pragmatic account of cognitive manipulation. In *Critical discourse studies in context and cognition*, ed. by Hart, Christopher, 65-80, Amsterdam/Philadelphia: John Benjamins.
- Mak, Willem M., and Sanders, Ted J. M. 2013. The role of causality in discourse processing: Effects of expectation and coherence relations. *Language and Cognitive Processes* 28:1414-1437.
- Mann, William C., Matthiessen, Christian M.I.M. and Thompson, Sandra A. 1989. *Rhetorical Structure Theory and Text Analysis*. ISI Research Report: ISI/RR-89-242 (University of Southern California).
- Mann, William C. and Thompson, Sandra A. 1986a. Rhetorical Structure Theory: Toward a functional theory of text organization. *Text* 8:243-281.
- Mann, William C. and Thompson, Sandra A. 1986b. Relational propositions in discourse. *Discourse Processes* 9:57-90.
- Marr, David. 1982. *Vision*. Cambridge, Mass.: The MIT Press.
- Marshall, Marlene Hurley B. 1987. *Verbs, Nouns, and Postpositives in Attic Prose*. Edinburgh: Scottish Academic Press.
- Martín López, M. Isabel. La función discursiva de la partícula griega δέ. *Habis* 24:219-234.
- Matei, Madalina. 2010. Discourse markers as functional elements. *Bulletin of the Transilvania University of Brasov* 3:119-126.
- Matic, Dejan. 2003. Topic, focus, and discourse structure. Ancient Greek word order. *Studies in Language* 27:573-633.
- Matsui, Tomoko. 2000. *Bridging and Relevance*. Amsterdam/Philadelphia: John Benjamins.
- Matsui, Tomoko. 2002. Semantics and pragmatics of a Japanese discourse marker *dakara* (so/in other words): a unitary account. *Journal of Pragmatics* 34:867-891.

- Mauri, Caterina and Auwera, Johan van der. 2012. Connectives. In *The Cambridge Handbook of Pragmatics*, ed. by Allan, Keith and Jaszczolt, Kasia M., 377-401, Cambridge: Cambridge University Press.
- Mazzarella, Diana. 2014. Is inference necessary to pragmatics? *Belgian Journal of Linguistics* 28:71-95.
- Mazzarella, Diana. 2015. Pragmatics and Epistemic Vigilance: The Deployment of Sophisticated Interpretative Strategies. *Croatian Journal of Philosophy* 15:183-199.
- MacKenzie, Ian. 2002. *Paradigms of Reading. Relevance Theory and Deconstruction*. New York: Palgrave Macmillan.
- Mercier, Hugo. 2012. Looking for Arguments. *Argumentation* 26:305-324.
- Mercier, Hugo, and Sperber, Dan. 2011. Why do humans reason? Arguments for an argumentative theory. *Behavioral and Brain Sciences* 34:57-111.
- Migne, J.-P. 1857. *Patrologiae cursus completus (series Graeca)* 35, pp. 532-720. Paris: Imprimerie Catholique.
- Miller, Walter. 1914. *Xenophon: Cyropaedia, Volume I* (translated by Miller). Cambridge, Mass.: Harvard University Press.
- Millis, Keith K., and Just, Marcel A. 1994. The Influence of Connectives on Sentence Comprehension. *Journal of Memory and Language* 33:128-147.
- Misener, Geneva. 1904. *The meaning of ΓΑΡ*. Baltimore: The Lord Baltimore Press.
- Moeschler, Jacques. 1989. Pragmatic Connectives, Argumentative Coherence and Relevance. *Argumentation* 3:321-339.
- Moeschler, Jacques. 1993. Relevance and Conversation. *Lingua* 90:149-171.
- Moeschler, Jacques. 1995. La pragmatique après Grice: contexte et pertinence. *L'Information grammaticale* 66:25-31.
- Moeschler, Jacques. 2016. Where is procedural meaning located? Evidence from discourse connectives and tenses. *Lingua* 175:122-138.
- Moore, Richard. 2015. I am a believer (review of Thom Scott-Phillips' *Speaking our Minds*). *The Times Literary Supplement*, 20th of April, 2015. Accessed online via <https://thomscottphillips.files.wordpress.com/2015/05/moore-review-of-speaking-our-minds.pdf> (last accessed 11th of November, 2016).
- Morgan John R. 1997. *Introduction*. In Lamb & Morgan, pp. xvii-xxix.
- Morgan, John R. 2014. Heliodorus the Hellene. In *Defining Greek Narrative*, ed. by Cairns, Douglas and Scodel, Ruth, 260-276, Edinburgh: Edinburgh University Press.
- Murillo, Silvia. 2004. A relevance reassessment of reformulation markers. *Journal of Pragmatics* 36:2059-2068.
- Murillo, Silvia. 2012. The use of reformulation markers in Business Management research articles: an intercultural analysis. *International Journal of Corpus Linguistics* 17:64-90.
- Murray, A.T. 1924. *Homer: Iliad. Books 1-12* (translation Murray; revised by William F. Wyatt). Cambridge, Mass.: Harvard University Press.
- Murray, Oswyn. 2007. Herodotus and Oral History. In Luraghi (ed.), pp. 16-44.
- Neale, Stephen. 1992. Paul Grice and the Philosophy of Language. *Linguistics and Philosophy* 15:509-559.
- Nicolle, Steve. 1998. A relevance theory perspective on grammaticalization. *Cognitive Linguistics* 9:1-35.
- Norrick, Neal R. 2009. Interjections as pragmatic markers. *Journal of Pragmatics* 41:866-891.
- Noveck, Ira A., and Sperber, Dan. 2004. *Experimental pragmatics*. New York: Palgrave Macmillan.
- Olmos, Susana, and Ahern, Aoife 2009. Contrast and propositional attitude: A relevance theoretic analysis of contrast connectives in Spanish and English. *Lingua* 119:51-66.

- Olmos, Susana, Saeed, John and Innocenti, Laura. 2011. The Procedure of Marking Contrast with Alternatives: A Constraint in the Derivation of Higher Level Explicatures. In Escandell-Vidal et al. (eds.), pp. 293-315.
- Ophuijsen, Johannes M. van. 1993. Οὐν, ἄρα, δῆ, τοίνυν: The linguistic articulation of arguments in Plato's *Phaedo*. In Sicking & Ophuijsen (eds.), pp. 67-164.
- Oréal, Elsa. 1997. Sur la fonction argumentative de quelques particules grecques. *Lalies* 17:229-249.
- Origgi, Gloria and Sperber, Dan. 2000. Evolution, communication and the proper function of language. In Carruthers & Chamberlain (eds.), pp. 140-169.
- Orriens, Sander. 2009. Involving the Past in the Present. The Classical Greek Perfect as a Situating Cohesion Device. In Bakker & Wakker (eds.), pp. 221-239.
- Ostrowiecki, Hélène. 1994. Limites du dialogue: Brève étude de la particule οὐν dans le *Ménon*. *Revue de philologie de littérature et d'histoire anciennes* 68:171-185.
- Oswald, Steve, Maillat, Didier and Saussure, Louis de. 2016. Deceptive and uncooperative verbal communication. In *Verbal Communication (Handbooks of Communication Science 3)*, ed. by Rocci, Andrea and Saussure, Louis de, 509-534, Berlin: Walter de Gruyter.
- Ouden, J.N. den, and Wijk, C.H. van, and Terken, J.M.B, and Noordman, L.G.M. 1998. Reliability of discourse structure annotation. *IPO Annual Progress Report* 33:129-138.
- Padilla Cruz, Manuel. 2012. Epistemic Vigilance, Cautious Optimism and Sophisticated Understanding. *Research in Language* 10:365-386.
- Paulsen, Thomas. 1992. *Inszenierung des Schicksals: Tragödie und Komödie im Roman des Heliodor*. Trier: Wissenschaftlicher Verlag.
- Pellet, Stéphanie. 2009. The Pragmatics of the French Discourse Markers *donc* and *alors*. In *Little Words: Their History, Phonology, Syntax, Semantics, Pragmatics, and Acquisition*, ed. by Leow, Ronald P., Campos, Hector and Lardiere, Donna, 159-170, Washington, D.C.: Georgetown University Press.
- Penner, Todd and Vander Stichele, Caroline. 2006. Rhetorical practice and performance in early Christianity. In Gunderson (ed.), pp. 245-260.
- Piantadosi, Steven T., Tily, Harry, and Gibson, Edward. 2012. The communicative function of ambiguity in language. *Cognition* 122:280-291.
- Pilkington, Adrian. 2000. *Poetic effects: A relevance theory perspective*. Amsterdam/Philadelphia: John Benjamins.
- Pinker, Steven. 1997. *How the Mind Works*. New York: W.W. Norton & Company.
- Polanyi, Livia. 1988. A Formal Model of the Structure of Discourse. *Journal of Pragmatics* 12:601-638.
- Polanyi, Livia and Scha, Remko J.H. 1983. The syntax of discourse. *Text* 3:261-270.
- Porter, Stanley E. and O'Donnell, Matthew Brook. 2007. Conjunctions, clines and levels of discourse. *Filología Neotestamentaria* 20:3-14.
- Potts, Christopher. 2005. *The Logic of Conventional Implicatures*. Oxford: Oxford University Press.
- Potts, Christopher. 2007. The expressive dimension. *Theoretical Linguistics* 33:165-198.
- Poythress, Vern S. 1984. The use of the intersentence conjunctions *de*, *oun*, *kai*, and *asyndeton* in the Gospel of John. *Novum Testamentum* 26:312-340.
- Prinz, Jesse J. 2006. Is the Mind Really Modular? In Stainton (ed.), pp. 22-36.
- Rapp, Claudia. 2005. *Holy Bishops in Late Antiquity: The Nature of Christian Leadership in an Age of Transition*. Oakland: University of California Press.
- Reboul, Anne. 2004. Conversational implicatures: nonce or generalized? In Noveck & Sperber (eds.), pp. 322-333.
- Reboul, Anne and Moeschler, Jacques. 1996. Faut-il continuer à faire de l'analyse de discours? *Hermes* 16:61-92.

- Recanati, François. 1993. *Direct Reference: From Language to Thought*. Oxford: Blackwell.
- Recanati, François. 2004. *Literal meaning*. Cambridge: Cambridge University Press.
- Redeker, Gisele. 1991. Linguistic markers of discourse structure (review of Deborah Schiffrin: *Discourse Markers*). *Linguistics* 29:1139-1172.
- Redeker, Gisele. 2000. Coherence and structure in text and discourse. In *Abduction, Belief and Context in Dialogue. Studies in Computational Pragmatics*, ed. by Black, William and Bunt, Harry (eds.), 233-263, Amsterdam/Philadelphia: John Benjamins.
- Redondo Moyano, Elena. 2004. Estudio de γάρ como marcador del discurso. *Revista de Filología Clásica* 17:11-30.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27:53-94.
- Revuelta Puigdollers, Antonio R. 2009. The Particles αὖ and αὖτε as Topicalizing Devices. In Bakker & Wakker (eds.), pp. 83-109.
- Reynen, Hans. 1957. Die Partikel οὖν bei Homer. *Glotta* 36:1-47.
- Reynen, Hans. 1958a. Die Partikel οὖν bei Homer. *Glotta* 37:67-102.
- Reynen, Hans. 1958b. Die Partikel οὖν bei Homer. *Glotta* 37:182-205.
- Rieber, Steven. 1997. Conventional implicatures as tacit performatives. *Linguistics and Philosophy* 20:51-72.
- Rijksbaron, Albert (ed.). 1997a. *New approaches to Greek particles*. Amsterdam: J.C. Gieben.
- Rijksbaron, Albert. 1997b. Introduction. In Rijksbaron (ed.), pp. 1-14.
- Risselada, Rodie and Spooren, Wilbert. 1998. Introduction: Discourse markers and coherence relations. *Journal of Pragmatics* 30:131-133.
- Robson, E. Iliff. 1929. *Arrian. Anabasis of Alexander, Volume I* (edition and translation Robson). Cambridge, Mass.: Harvard University Press.
- Rosales Sequeiros, Xosé. 2012. *Linguistic meaning and non-truth-conditionality*. Bern: Peter Lang.
- Rossari, Corinne. 1994. *Les opérations de reformulation. Analyse du processus et des marques dans une perspective contrastive français-italien*. Bern: Peter Lang.
- Rouchota, Villy. 1990. But: contradiction and relevance. *UCL Working Papers in Linguistics* 2:65-81.
- Rouchota, Villy. 1996. Discourse connectives: what do they link? *UCL Working Papers in Linguistics* 8:199-214.
- Rouchota, Villy. 1998. Connectives, coherence and relevance. *Current Issues in Relevance Theory* 58:11-57.
- Samuels, Richard. 2000. Massively modular minds: evolutionary psychology and cognitive architecture. In Carruthers & Chamberlain (eds.), pp. 13-46.
- Samuels, Richard. 2006. Is the Human Mind Massively Modular? In Carruthers & Chamberlain (eds.), pp. 37-56.
- Sanders, Ted J. M., and Noordman, Leo G. M. 2000. The role of coherence relations and their linguistic markers in text processing. *Discourse Processes* 29:37-60.
- Sanders, Ted J.M. and Spooren, Wilbert P.M. 2007. Discourse and text structure. In *Handbook of Cognitive Linguistics*, ed. by Geeraerts, Dirk and Cuykens, Hubert, 916-940, Oxford: Oxford University Press.
- Sanders, Ted J. M., Spooren, Wilbert. P. M., and Noordman, Leo G. M. 1992. Toward a Taxonomy of Coherence Relations. *Discourse Processes* 15:1-35.
- Sanders, Ted J.M., Spooren, Wilbert P.M., and Noordman, Leo G.M. 1993. Coherence relations in a cognitive theory of discourse representation. *Cognitive Linguistics* 4:93-133.
- Sasamoto, Ryoko. 2008. Japanese discourse connectives *dakara* and *sorede*: A re-assessment of procedural meaning. *Journal of Pragmatics* 40:127-154.

- Saussure, Louis de. 2011. On Some Methodological Issues in the Conceptual/Procedural Distinction. In Escandell-Vidal et al. (eds.), pp. 55-79.
- Saussure, Louis de. 2013. Background relevance. *Journal of Pragmatics* 59:178-189.
- Schenkeveld, Dirk M. 1988. From particula to particle – the genesis of a class of words. In *L'héritage des grammairiens latins de l'antiquité aux lumières: Actes du colloque de Chantilly, 2-4 septembre 1987*, ed. by Rosier, Irène, 81-93, Louvain: Peeters.
- Scheppers, Frank. 2011. *The colon hypothesis: word order, discourse segmentation and discourse coherence in ancient Greek*. Brussels: VUB Press.
- Schiffrin, Deborah. 1986. Functions of *and* in Discourse. *Journal of Pragmatics* 10:41-66.
- Schiffrin, Deborah. 1987. *Discourse markers: Studies in interactional sociolinguistics*. Cambridge: Cambridge University Press.
- Schleppegrell, Mary J. 1991. Paratactic *Because*. *Journal of Pragmatics* 16:323-337.
- Schmid, Hans-Jörg. 2000. *English abstract nouns as conceptual shells: from corpus to cognition*. Berlin/New York: Mouton de Gruyter.
- Schourup, Lawrence. 1999. Discourse markers. *Lingua* 107:227-265.
- Schourup, Lawrence. 2011. The discourse marker *now*: A relevance-theoretic approach. *Journal of Pragmatics* 43:2110-2129.
- Schricks, Josine. 2011. Lateinische Modalpartikeln: *nempe, quippe, scilicet, videlicet* und *nimirum*. Leiden: Brill.
- Schwab, Andreas. 2012. From a Way of Reading to a Way of Life: Basil of Caesarea and Gregory of Nazianzus about Poetry in Christian Education. In *Religious Education in Pre-Modern Europe*, ed. by Tanaseanu-Döbler, Ilinca and Döbler, Marvin, 147-162, Leiden: Brill.
- Scott, Kate. 2013. *This and that*: A procedural analysis. *Lingua* 131:49-65.
- Scott-Phillips, Thomas C. 2010. The Evolution of Relevance. *Cognitive Science* 34:583-601.
- Scott-Phillips, Thomas C. 2015. *Speaking our minds: why human communication is different, and how language evolved to make it special*. New York : Palgrave Macmillan. [note: references in the text are from the e-book version on an iPad Mini.]
- Seneviratne, Sharmaine. 2005. The Relevance Theoretic Approach to Discourse Markers: A Unified Account? *Research Centre for English and Applied Linguistics: Working Papers* 11:355-425.
- Sicking, Christiaan M.J. 1993. Devices for text articulation in Lysias I and XII. In Sicking & Ophuijsen (eds.), pp. 1-66.
- Sicking, Christiaan M.J. 1997. Particles in questions in Plato, In Rijksbaron (ed.), pp. 157-174.
- Sicking, Christiaan M.J. and Ophuijsen, Johannes M. van. 1993. *Two Studies in Attic Particle Usage: Lysias and Plato*. Leiden: Brill.
- Simon, Herbert A. 1997. *Models of Bounded Rationality* (volume 3). Cambridge, Mass.: The MIT Press.
- Sinclair, John. 1981. Planes of Discourse. In *The Two Fold Voice: Essays in Honour of Ramesh Mohan*, ed. by Rizvi, S.N.A., 70-89, Salzburg: Salzburg University.
- Slings, Simon R. 1997. Adversative relators between PUSH and POP. In Rijksbaron (ed.), pp. 101-129.
- Slings, Simon R. 2002. Oral Strategies in the Language of Herodotus. In *Brill's Companion to Herodotus*, ed. by Bakker, Egbert J. & Jong, Irene J.F. de & Wees, Hans van, 53-77, Leiden: Brill.
- Sluiter, Ineke. 1997. Parapleromatic lucubrations. In Rijksbaron (ed.), pp. 233-246.
- Sinclair, John and Coulthard, Malcolm. 1992. Towards an analysis of discourse. In *Advances in Spoken Discourse Analysis*, ed. by Coulthard, Malcolm, 1-34, London: Routledge.
- Smith, Andrew D. M. 2008. Protolanguage reconstructed. *Interaction Studies* 9:100-116.
- Smyth, Herbert W. 1920. *A Greek Grammar for Colleges*. New York: American Book Company.

- Soltic, Jorie. 2012. The distribution of object clitic pronouns in the Grottaferrata manuscript of Digenis Akritis. *Byzantine and Modern Greek Studies* 36:178-197.
- Soltic, Jorie. 2013. Late Medieval Greek *πάλιν*: a discourse marker signaling topic switch. *Greek, Roman and Byzantine Studies* 53:390-419.
- Soltic, Jorie. 2014. The Particle *γάρ*: From Ancient Greek Sentence Connector to Blatant Line Filler? A Case-study on the Late Medieval Greek Chronicle of Morea. *Symbolae Osloenses* 88:136-147.
- Soltic, Jorie. 2015. Parenthetical "I say (you)" in Late Medieval Greek vernacular: a message-structuring discourse marker rather than a message-conveying verb. *Journal of Historical Pragmatics* 16:187-217.
- Southgate, Victoria, Chevallier, Coralie and Csibra, Gergely. 2009. Sensitivity to communicative relevance tells young children what to imitate. *Developmental Science* 12:1013-1019.
- Sperber, Dan, and Wilson, Deirdre. 1987. Précis of *Relevance: Communication and Cognition*. *Behavioral and Brain Sciences* 10:697-710.
- Sperber, Dan and Wilson, Deirdre. 1995². *Relevance: Communication & Cognition*. Oxford: Blackwell.
- Sperber, Dan, and Wilson, Deirdre. 2002. Pragmatics, modularity and mind-reading. *Mind & Language* 17:3-23.
- Sperber, Dan, Cara, Francesca and Girotto, Vittorio. 1995. Relevance Theory Explains the Selection Task. *Cognition* 57:31-95.
- Sperber, Dan, Clement, Fabrice, Heintz, Christophe, Mascaro, Olivier, Mercier, Hugo, Origg, Gloria and Wilson, Deirdre. 2010. Epistemic Vigilance. *Mind & Language* 25:359-393.
- Sperber, Dan. 1994. The modularity of thought and the epidemiology of representations. In Hirschfeld & Gelman (eds.), pp. 39-67.
- Sperber, Dan. 2000. *Metarepresentations: a multidisciplinary perspective*. Oxford: Oxford University Press.
- Sperber, Dan. 2001a. An evolutionary perspective on testimony and argumentation. *Philosophical Topics* 29:401-413.
- Sperber, Dan. 2001b. In defense of massive modularity. In *Language, Brain and Cognitive Development: Essays in Honor of Jacques Mehler*, ed. by Dupoux, Emmanuel, 45-57, Cambridge, Mass.: The MIT Press.
- Sperber, Dan. 2005. How Can a Massively Modular Mind Be Flexible and Context-Sensitive? In *The Innate Mind: Structure and Contents*, ed. by Carruthers, Peter, Laurence, Stephen, and Stich, Stephen, 53-68, Oxford: Oxford University Press.
- Sperber, Dan and Noveck Ira A. 2004. Introduction. In Noveck & Sperber (eds.), pp. 1-22.
- Sperber, Dan and Wilson, Deirdre. 2005. Pragmatics. In *The Oxford Handbook of Contemporary Philosophy*, ed. by Jackson, Frank and Smith, Michael, 468-501, Oxford: Oxford University Press. Reprinted in Wilson & Sperber (2012), pp. 1-27.
- Spooren, Wilbert and Degand, Liesbeth. 2010. Coding coherence relations: Reliability and validity. *Corpus Linguistics and Linguistic Theory* 6:241-266.
- Stainton, Robert J (ed.). 2006. *Contemporary Debates in Cognitive Science*. Oxford: Blackwell.
- Stede, Manfred and Schmitz, Birte. 2000. Discourse Particles and Discourse Functions. *Machine Translation* 15:125-147.
- Sternau, Marit, Ariel, Mira, Giora, Rachel, and Fein, Ofer. 2015. Levels of interpretation: New tools for characterizing intended meanings. *Journal of Pragmatics* 84:86-101.
- Swain, Simon. 1996. *Hellenism and empire : language, classicism, and power in the Greek world, AD 50-250*. Oxford: Clarendon Press.
- Sweetser, Eve. 1990. *From etymology to pragmatics : metaphorical and cultural aspects of semantic structure*. Cambridge: Cambridge University Press.

- Taboada, Maite, and Gómez-González, María de los Ángeles. 2012. Discourse markers and coherence relations: Comparison across markers, languages and modalities. *Linguistics and the Human Sciences* 6:17-41.
- Taboada, Maite, and Mann, William C. 2006. Rhetorical Structure Theory: looking back and moving ahead. *Discourse Studies* 8:423-459.
- Tanaka, Hiroaki. 1997. *In other words* and conversational implicature. *Pragmatics* 7:367-387.
- Temmerman, Koen de. 2014. *Crafting characters: heroes and heroines in the ancient Greek novel*. Oxford: Oxford University Press.
- Thijs, Kees. 2012. Τί γάρ ἐστι; Turn-initial γάρ in Greek dramatic dialogue. Paper presented at the *Yearly Conference of Dutch-speaking Hellenists* ('Hellenistendag') (Amsterdam).
- Thomson, George. 1939. The Postponement of Interrogatives in Attic Drama. *The Classical Quarterly* 33:147-152.
- Thrall, Margaret E. 1962. *Greek particles in the New Testament: linguistic and exegetical studies*. Grand Rapids: Eerdmans.
- Tomasello, Michael. *Origins of Human Communication*. Cambridge, Mass.: The MIT Press.
- Tooby, John and Cosmides, Leda. 1995. Foreword to Baron-Cohen, Simon (1995), *Mindblindness*, pp. xi-xviii. Cambridge, Mass.: The MIT Press.
- Traugott, Elizabeth C. and Dasher, Richard B. 2002. *Regularity in semantic change: Cambridge studies in linguistics*. Cambridge: Cambridge University Press.
- Travis, Charles. 2008. *Occasion-Sensitivity. Selected Essays*. Oxford: Oxford University Press.
- Tversky, Amos and Kahneman, Daniel. 1974. Judgment under Uncertainty: Heuristics and Biases. *Science* 185:1124-1131.
- Unger, Christoph. 1996. The scope of discourse connectives: Implications for discourse organization. *Journal of Linguistics* 32:403-438.
- Unger, Christoph. 2011. Exploring the Borderline between Procedural Encoding and Pragmatic Inference. In Escandell-Vidal et al. (eds.), pp. 103-127.
- Unger, Christoph. 2012. Procedural semantics, metarepresentation, and some particles in Behdini Kurdish. *Lingua* 122:1613-1635.
- Vaskó, Ildikó and Fretheim, Thorstein. 1997. Some central pragmatic functions of the Norwegian particles *altså* and *nemlig*. In *Modality in Germanic Languages: Historical and Comparative Perspectives*, ed. by Swan, Toril and Westvik, Olaf Jansen, 233-292, Berlin/New York: Mouton de Gruyter.
- Verano, Rodrigo. 2015a. *La reformulación discursiva en griego antiguo. Un estudio sobre La República de Platón*. Sevilla: University of Sevilla. [doctoral dissertation]
- Verano, Rodrigo. 2015b. Linguistic paraphrase and Platonic dialogue. A study on reformulation in Ancient Greek. Paper presented at the *International Colloquium on Ancient Greek Linguistics* (Rome).
- Vince, J.H. 1930. *Demosthenes: Orations, Volume I* (translation Vince). Cambridge, Mass.: Harvard University Press.
- Vincent, Sophie, Darbaky, Sarah and Mettouchi, Amina. 2009. The grammaticalization of *you know*. From shared knowledge to control over the co-speaker. *English Text Construction* 2:209-227.
- Wackernagel, Jakob. 1892. Über ein Gesetz der indogermanischen Wortstellung. *Indogermanische Forschungen* 1:333-436.
- Wakker, Gerry C. 1997. Emphasis and affirmation. Some aspects of μήν in tragedy. In Rijksbaron (ed.), pp. 209-231.
- Wakker, Gerry C. 2009. 'Well I Will Now Present My Arguments'. Discourse Cohesion Marked By οὖν and τοίνυν in Lysias. In Bakker & Wakker (eds.), pp. 63-81.
- Walaszewska, Ewa. 2013. *Like in Similes – A Relevance-Theoretic View*. *Research in Language* 11:323-334.

- Webb, Ruth. 2008. Basil of Caesarea and Greek Tragedy. In *A Companion to Classical Receptions*, ed. by Hardwick, Lorna and Stray, Christopher, 62-71, Oxford: Wiley-Blackwell.
- Wharton, Tim. 2001. Paul Grice, saying and meaning. *UCL Working Papers in Linguistics* 14:207-248.
- Whitmarsh, Tim. 2001. *Greek literature and the Roman empire: the politics of imitation*. Oxford: Oxford University Press.
- Whitmarsh, Tim. 2008. *The Cambridge companion to the Greek and Roman novel*. Cambridge: Cambridge University Press.
- Whitmarsh, Tim. 2011. *Narrative and identity in the ancient Greek novel : returning romance: Greek culture in the Roman world*. Cambridge: Cambridge University Press.
- Wierzbicka, Anna. 1986. Special Issue on Particles: Introduction. *Journal of Pragmatics* 10:519-534.
- Wierzbicka, Anna. 1991. *Cross-cultural pragmatics. The semantics of human interaction*. Berlin/New York: Mouton de Gruyter.
- Wilson, Deirdre. 1998. Discourse, coherence and relevance: A reply to Rachel Giora. *Journal of Pragmatics* 29:57-74.
- Wilson, Deirdre. 2005. New directions for research on pragmatics and modularity. *Lingua* 115:1129-1146.
- Wilson, Deirdre. 2011. Relevance and the interpretation of literary works. *UCL Working Papers in Linguistics* 23:69-80.
- Wilson, Deirdre. 2014. Relevance theory. *UCL Working Papers in Linguistics* 26:129-148.
- Wilson, Deirdre. 2016. Reassessing the conceptual-procedural distinction. *Lingua* 175-176:5-19.
- Wilson, Deirdre, and Carston, Robyn. 2006. Metaphor, relevance and the 'emergent property' issue. *Mind & Language* 21:404-433.
- Wilson, Deirdre and Carston, Robyn. 2007. A Unitary Approach to Lexical Pragmatics: Relevance, Inference and Ad Hoc Concepts. In Burton-Roberts (ed.), pp. 230-259.
- Wilson, Deirdre and Matsui, Tomoko. 2000. Recent approaches to bridging: truth, coherence, relevance. In *Lengua, Discurso, Texto*, vol. 1, ed. by Bustos Tovar, José J. De, Charaudeau, Patrick, Girón Alconchel, José L., Iglesias Recuero, Silvia and Lopez Alonso, Covadonga 103-132. Madrid: Visor Libros. Reprinted in Wilson & Sperber (2012), pp. 187-209.
- Wilson, Deirdre, and Sperber, Dan. 1993. Linguistic Form and Relevance. *Lingua* 90:1-25.
- Wilson, Deirdre and Sperber, Dan. 2002. Truthfulness and Relevance. *Mind* 111:583-632. Reprinted in Wilson & Sperber (2012), pp. 47-83.
- Wilson, Deirdre and Sperber, Dan. 2004. Relevance Theory. In Horn & Ward (eds.), pp. 607-632.
- Wilson, Deirdre, and Sperber, Dan. 2012. *Meaning and relevance*. Cambridge: Cambridge University Press.
- Wolf, Florian and Gibson, Edward. 2005. Representing Discourse Coherence: A Corpus-Based Study. *Association for Computational Linguistics* 31:249-287.
- Woodward, James and Cowie, Fiona. 2004. The Mind is not (just) a System of Modules Shaped (just) by Natural Selection. In *Contemporary Debates in Philosophy of Science*, ed. by Hitchcock, Christopher, 312-334. Oxford: Blackwell.
- Zakowski, Samuel. 2014a. Εἰπέ μοι as a Parenthetical: A Structural and Functional Analysis, from Homer to Menander. *Greek Roman and Byzantine Studies* 54:157-191.
- Zakowski, Samuel. 2014b. Inference and metarepresentation: Ancient Greek as a constraint on higher-level explicatures. *Journal of Pragmatics* 74:109-128.
- Zakowski, Samuel. 2014c. The distribution of ἄν in John Chrysostom's homilies *Adversus Iudaeos*. *Acta Classica* 57:184-224.

- Zakowski, Samuel. 2014d. You Didn't Build That. A Relevance-Theoretic Approach to President Obama's Campaign Flub. *Pragmatics* 24:819-838.
- Zakowski, Samuel. 2016. She was twelve years old: on and Mark 5:42. *Glotta-Zeitschrift Fur Griechische Und Lateinische Sprache* 92:305-317.
- Zakowski, Samuel. 2018. The evolution of the Ancient Greek deverbial pragmatic markers áge, íthi and phére. To appear in *Journal of Historical Pragmatics* 19.
- Zénone, Anna. 1981. Marqueurs de consecution: Le cas de *donc*. *Cahiers de linguistique française* 2:113-139.
- Zwicky, Arnold M. *On Clitics*. Bloomington: Indiana University Linguistics Club.
- Zwicky, Arnold M. 1985. Clitics and Particles. *Language* 61:283-305.

Appendix: List of characters in the *Aethiopica*

(Listed in order of appearance in the *Aethiopica* – only characters which are mentioned in this dissertation.)

Chariclea: female protagonist of the story.

Theagenes: male protagonist of the story.

Thyamis: chief of the brigands who find Theagenes and Chariclea at the beginning of the book. Exiled priest of Memphis. Son of Calasiris, brother of Petosiris.

Cnemon: Greek youth who acts as interpreter for Thyamis, and joins Chariclea and Theagenes for a part of their journey. Calasiris is talking to him when he tells his embedded story of what happened to Theagenes and Chariclea before Cnemon met them.

Aristippus: father of Cnemon.

Demaenete: stepmother of Cnemon, who is in love with him and schemes with Thisbe to get him into her bed.

Thisbe: servant of Demaenete, who, along with Demaenete, tricked Cnemon into threatening his father with a sword and getting him exiled from Athens. Subsequently flees Athens, is captured by Thermouthis and killed by Thyamis, who thinks that she is Chariclea.

Nausicles: merchant who is in love with Thisbe. Helps her escape when she is under threat from Demaenete's relatives. Organizes the expedition, led by Mitranes, which attacks Thyamis' brigands in order to get Thisbe back.

Mitrane: prefect of Oroondates; hired by Nausicles to look for Thisbe on Thyamis' brigands' island.

Oroondates: lieutenant-governor (satrap) of the Persian king in Egypt; main opponent of Hydaspes.

Thermouthis: Thyamis's uncouth second-in-command; Thisbe's 'lover'.

Calasiris: Egyptian sage and former priest of Memphis; guardian of Chariclea and Theagenes; father of Thyamis and Petosiris. Narrator of embedded story of what happened to Theagenes & Chariclea before they met Cnemon.

Charicles: priest of Apollo at Delphi; adoptive father of Chariclea.

Persinna: wife of Hydaspes, queen of Ethiopia. Gave birth to Chariclea but gave her up due to her white skin color, and the shame it would bring (as well as the aspersions which it would cast) upon a black queen and her husband.

Tyrrhenus: deaf fisherman who provides lodging to Calasiris, Theagenes and Chariclea, and warns them of the impending attack by Trachinus and his pirates.

Trachinus: leader of the pirates who capture Calasiris, Chariclea and Theagenes, and hence captain of the ship on which Theagenes and Chariclea are found at the beginning of the *Aethiopica*. In love with Chariclea.

Pelorus: Trachinus' second-in-command. Just like Trachinus, he is in love with Chariclea. In his refusal to accept that she belongs to his captain, he starts a fight over her (which culminates in the massacre and shipwreck at the beginning of the *Aethiopica*).

Arsace: wife of Oroondates, who falls madly in love with Theagenes at Memphis. Plots with her servant Cybele to get Theagenes to love her.

Petosiris: brother of Thyamis and son of Calasiris, who schemed to take the priesthood at Memphis away from his brother.

Cybele: servant of Arsace, who plots with her to get Theagenes to love her mistress.

Achaemenes: son of Cybele. Chariclea is promised to him in marriage, but the betrothal is canceled when it turns out Theagenes & Chariclea are not brother and sister, but already promised to each other.

Hydaspes: king of Ethiopia; unbeknownst to him, also the father of Chariclea.

Bagoas: eunuch; trusted servant of Oroondates, who is tasked with bringing Theagenes and Chariclea to his master.

Euphrates: Oroondates' chief eunuch at Memphis.

Sisimithres: one of the Gymnosophists (wise men at the court of Ethiopia); tasked by Persinna to expose Chariclea when she was born. Plays a key role in persuading Hydaspes that Chariclea is his daughter.

